SPECIAL "PRE-CONVENTION BULLETIN" AND "ANNUAL SESSION PROGRAM" NUMBER
Sixty-second Annual Session California Medical Association—Hotel Del Monte, April 24–27, 1933.

CALIFORNIA AND WESTERN MEDICINE

Owned and Published Monthly by the California Medical Association
FOUR FIFTY SUTTER, ROOM 2004, SAN FRANCISCO
ACCREDITED REPRESENTATIVE OF THE CALIFORNIA AND NEVADA MEDICAL ASSOCIATIONS

VOLUME XXXVIII
NUMBER 4

APRIL · 1933

50 CENTS A COPY
$5.00 A YEAR

CONTENTS AND SUBJECT INDEX

"Entered as second-class matter at the post office at San Francisco, California, under the Act of March 3, 1879." Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 10, 1918.

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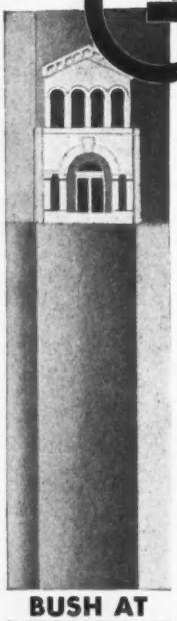

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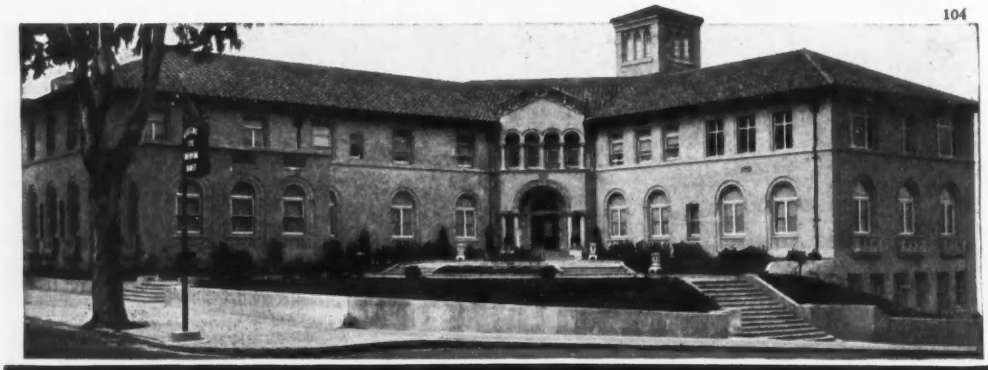

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1932–1933

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VOLUME XXXVIII APRIL, 1933 No. 4

RETINAL DETACHMENT—ITS OPERATIVE CURE*

REPORT OF CASES

By OTTO BARKAN, M. D.
H. GORDON SMITH, M. D.
AND
S. F. BOYLE, M. D.
San Francisco

DISCUSSION *by M. F. Weymann, M. D., Los Angeles; W. H. Roberts, M. D., Pasadena; A. Ray Irvine, M. D., Los Angeles.*

TEN years ago Vail published the results of a circular letter sent to 281 ophthalmologists in the United States on the question of cure of retinal detachments. It was found that out of 25,000 cases less than one per thousand had become reattached spontaneously or following treatment. In reviewing the literature, as well as one's personal experiences, a case of reattachment would seem to be the exception that proves the rule. No wonder, then, that the attitude toward retinal detachment was one of therapeutic nihilism until Gonin of Lausanne focused the attention of the ophthalmological world on his ideas and methods at the International Ophthalmological Congress at Amsterdam in 1929. Therewith, therapeutic nihilism gave way to constructive efforts. It is to Gonin's credit to have brought about this change, irrespective of whether the future shall prove his ideas to be largely correct or not or whether his own particular method will be maintained. All modern methods are built upon the work of Gonin. We may now meet the problem of detachment with a fair prospect of success instead of with resignation as heretofore. It is, I think, the consensus of opinion that his work constitutes the major advance in ophthalmology of recent times.

The word "cure" has been used advisedly in the title of this paper. If the detached retina can be reattached and visual functions restored and maintained for a period of observation of eight years, as has been done, it would seem proper to apply the term "cure" in the common meaning of the word.

Formerly the treatment of retinal detachment was simple, standard, and impotent. Now, since there is a possibility of cure, it places upon one a great responsibility and one may truly be made the arbiter of human fate. This is especially true in one-eyed cases, and, at the present stage of the operation when the operative indications are still under discussion, the technique of localization demands minute care and patience, and the technique of operation is still under development. No one who touches the subject should forget that he is entering a field of many as yet unknown factors and that he is assuming a great responsibility in the undertaking.

CLOSURE OF THE RETINAL TEAR

The scope of this paper must be limited to a brief review of the present situation and to some personal experiences and observations. It seems to be the consensus of opinion that in the type of retinal detachment under discussion, viz., the so-called idiopathic, senile, myopic, often precipitated by trauma, the hole or tear in the retina is either the primary cause or is at least in some causal relationship to the detachment. Consequently its closure would seem to be an important and perhaps an essential factor to obtain reattachment. Whether it is a *sine qua non* remains to be determined. The assumption of its causal relationship gives, in any case, the best working basis to date. Vogt and others have reported cases where repeated ignipuncture of holes had remained without result until a last small hole was discovered which, when closed by the cautery, led to prompt reattachment of the retina. We have had personal experiences which were similarly highly suggestive of the importance of the rôle played by the tear. In any case, it would seem essential to close the tear itself either by causing an adhesive choroiditis within its area or by walling it off from the surrounding retina. To accomplish this it is essential to find and localize the tear; and for this reason discussion of the subject centers upon:

1. The technique of localization of the retinal tear.
2. The technique of operation upon the tear.
3. The operative indications and prognosis.

OPERATIVE INDICATIONS

To begin with No. 3: Which detachments, or which eyes, are amenable to operation? What is the relative chance of anatomical reattachment? Of functional restitution? Of permanent "cure"? Which eyes do poorly in spite of a proper oper-

* Read before the Eye, Ear, Nose and Throat Section of the California Medical Association at the sixty-first annual session, Pasadena, May 2-5, 1932.

ation? Which do well without operation or remain stationary? Amsler is especially conservative in his indication for operation. He refused operation in forty-four out of seventy-four cases of detachment because, as he says, the "eyes seemed too sick." He defines a typical surgical case as follows: "A single tear of not too large dimensions, located in the equatorial region; a sectoform, movable detachment of the retina in more or less clear association with the tear; a practically clear vitreous (especially in the retinal periphery); and last, a completely quiet anterior bulbar segment." In such a case, detachment and retinal tear have occurred in an apparently healthy eye and therefore offer a better surgical prognosis than in those eyes which he terms as being "too sick."

PROGNOSIS AS BASED ON PAST RESULTS

The percentage of results or "cures" varies from 20 to 50 per cent and over in the statistics of individual operators, according to the selection of material operated upon. The percentages conform rather closely, however, when the statistics are analyzed according to the operability of the case (size of tear, duration, etc.). Thus, Stein of Elschnig's Clinic reports on ninety cases seen in 1931. Ten were refused operation as being hopeless. In twenty no tear could be found and therefore the Gonin operation was not done. Out of the sixty remaining cases, fourteen were cured, or 24 per cent. With proper selection (rejection of detachments of over three months' duration, of those with very large or multiple tears or extensive retinal degeneration) the percentage of reattachments increased to about 50 per cent in the traumatic cases and to 30 per cent in the spontaneous, myopic, and senile forms. Per contra, of the twenty cases in which no tear could be found, only one was reattached by ignipuncture. This corresponds with the relatively very poor percentage of results obtained by ignipuncture before the method of Gonin gave significance to the need of closure of the tear. Stein's statistics of Elschnig's Clinic, from 1914 to 1929, is a good example of this. Of 326 detachments, treated and operated in different ways (including eighteen ignipunctures) only six reattachments were obtained, or 2 per cent.

From 1928 to 1930, Lindner reports 75 cases operated and 27 cured. Tears were localized in 59 of these cases and 23 of these were cured, or 38 per cent. In early cases the percentage increased to 64 per cent. In older cases (duration from six weeks to eight months) the percentage of cures was reduced to 28 per cent.

The factor played by the duration of the detachment is well illustrated by a series of Gonin's selected cases:

Recurrences were found to be rare after three weeks' reattachment.

The operation itself is not without its dangers, even in the most experienced hands. If the retina is friable, new tears may be produced by the ignipuncture. For this very reason, cases of friable retina more especially demand early operation before the retina may degenerate further. Axenfeld, among others, has emphasized the importance of watchful waiting in certain cases. On the other hand, Gonin warns against losing time in a monocular case with friable retina. The writers of this paper have been led through personal experience to subscribe to this view. On the whole, early operation should be the rule and medical men at large, as well as specialists, should realize the importance of early operation in cases of retinal detachment.

TECHNIQUE

Finding the Retinal Tear.—The writers have used the original Gonin technique, with slight variation. Many tears are quickly discovered; others must be looked for repeatedly under maximal mydriasis with atropin and links-glaucosan for hours at a time, on successive days and in different positions. We have discovered the tear in well over 80 per cent in our series of forty cases.

Localization of the Tear.—When the tear has been found we mark its meridian on the opposite limbus with methylene blue; then on the other side of the limbus with India ink.

Various complicated devices and instruments have been invented to obtain more accurate localization, but it is questionable whether they give results that are in any way superior to the above method, which is the one used by both Elschnig and Vogt.

We feel that we have been able further to improve this method by placing a small bit of paper in the center of the butynized cornea. We have proved to our satisfaction that it is an easy matter to determine accurately the center of a small circle such as the cornea with the naked eye. We then use an ophthalmoscope with a special head which permits slitting down of the light to a narrow long band. With this we look at the hole in the retina in such a way that the slit of light will pass through both the retinal hole and the corneal center. An assistant marks the limbus with methylene blue where the light band traverses it. The straight line connecting tear, corneal center, and limbus gives the correct meridian. On the operating table the limbal marks are connected with a black silk suture, the meridian having again been checked with the ophthalmoscope. The place of the tear is measured in the usual way by disk diameters from the

Duration of Detachment

Time	Number of Cases Operated	Cures	Per Cent	Single Ignipuncture
Up to three weeks	30	24	80	16
Up to three months	31	15	48	15
Over three months	20	6	30	....

ora, is marked on the sclera with India ink, and the ignipuncture performed at this place. When the cauterization has been completed we again examine with the ophthalmoscope to insure the tear having been included and are prepared to cauterize again at the same sitting.

Space does not permit nor is it within the scope of this paper to further discuss the technique or its refinements. Suffice it to say that the procedure is still a very individual problem which has progressed far beyond its beginnings, and yet shows promise of future development. As each case is an individual problem and demands independent thinking, a summary of personal experiences is appended in the hope that it may prove of interest.

AUTHORS' EXPERIENCE

In the last one and one-half years, out of over forty cases of retinal detachment, fourteen were selected for operation. The others were advised against operation either because they were hopeless or because the prognosis seemed too poor to justify an operation and the ensuing two or three weeks' hospitalization. Of the fourteen operated cases, two were perforating injuries with a very poor prognosis. Cases of this type we should not operate today, but did so at the time, as the patients were very desirous of taking the chance of improvement, no matter how slight, and there was nothing to be lost. Another patient who should not be included in this series was a woman who was blind in both eyes as a result of a double-sided retinal detachment following cataract operation done elsewhere with the Barraquer suction method. No tear in the retina was found and the result was negative. Of the eleven remaining cases, six became reattached, one had a recurrence after six weeks, following severe direct violence to the eye. This case had been demonstrated at the meeting of our State Medical Society in San Francisco in 1931 with the retina of his only eye completely reattached and reading small print. The other cases have all remained reattached to date for periods of from ten to eighteen months. This gives a percentage of over 50 per cent reattachment. The amount of restitution of vision depended upon the condition of the retina before its detachment (in Cases 3 and 4, central retinitis antedating the detachment) and upon the duration of the detachment. In Case 5 the central scotoma was, no doubt, due to the twenty months' duration of detachment. Cases of one to two years' duration offer a progressively poorer prognosis. They may become anatomically reattached, but the chance of restoration of visual function diminishes with the lapse of time due to the degeneration that has occurred in the central region of the detached retina.

CONCLUSIONS

The operation for retinal detachment opens a new field in ophthalmic surgery and gives a chance of permanent cure in a condition which, up to the present, has, practically speaking, been incurable. In early, selected cases, 50 per cent of reattachments may be obtained with useful vision.

REPORT OF CASES

Case 1.—E. P. H. Man, aged 65. Right eye blind since twelve years from retinal detachment. Left eye, detachment extending from above over the macular region, of six weeks' duration. A single hole present in extreme periphery. Vision, counts fingers at two feet. Operation, one ignipuncture. Result, anatomical reattachment with normal visual field. Vision, 6/10 and J II. After two months, patient received a severe trauma to this eye, with recurrence of detachment occurring within twenty minutes. No tear could be found. Operation was done without result.

* * *

Case 2.—A. B. Girl, aged 21. Myopia —4.0. Duration of detachment, two and one-half months. Vision, 6/10 and J II. Sectoform defect of field down and nasally. A very small tear in the retina was discovered in the upper outer quadrant. Bed rest of six weeks had temporary effect only, detachment recurring upon her arising from bed. As the retina in the immediate neighborhood of the original small hole appeared friable and showed new small tears as time progressed, which small tears coalesced, forming a slightly larger one, it was decided to operate without further delay. One ignipuncture was done. Result, anatomical complete reattachment. Visual field normal. Vision, 10/10 and J I. To date, two years after the operation, the condition is the same.

* * *

Case 3.—M. B. Man, aged 23. In 1928 patient noticed poor vision of the left eye by accident. Since then vision gradually continued to fail. In June, 1931, when first seen by us, the left eye showed a low-grade neuroretinitis with edema in the macular region and progressive loss of vision. In August, 1931, he had developed a retinal detachment in the lower outer quadrant, showing one definite small hole at 4 o'clock. Vision, counted fingers at three feet. Operation, first ignipuncture scar became contiguous to the hole, but did not close it. One month afterward ignipuncture was repeated, the second puncture being contiguous to the hole at its other side. At the same session, puncture was repeated and this time the hole was struck in the middle and closed. Result, complete anatomical reattachment. Vision, counts fingers at eight feet, the reduction of vision being due to the central scotoma which preceded the operation, and was a result of the retinitis. Visual field otherwise normal. Result maintained at present time over one year after operation.

* * *

Case 4.—S. S. Man, aged 60. Senile detachment of right eye almost total and reducing vision to seeing of hand movements in the temporal quadrant only. Duration, six weeks. One small tear was discovered at 10 o'clock near the ora serrata. One ignipuncture done, which closed the hole. Result, complete anatomical reattachment. Vision, 1/10. Reduced vision caused by central scotoma result of macular changes. To date, one and one-half years after operation, the result is the same.

* * *

Case 5.—Man, aged 30. Left eye injured with tennis ball twenty months previously. Duration of detachment, one and one-half years. Vision, seeing of hand movements in the lower temporal quadrant only. Total detachment of retina, except for a small portion up and in. A single small tear was localized near the ora serrata at 2 o'clock. Operation, one ignipuncture, striking the tear and closing it. Result, complete anatomical reattachment. Vision, counts fingers at two feet. Reduction of vision due to a large central scotoma antedating operation and caused by degeneration of the retina in the macular region. To date, one years after operation, the result is the same.

* * *

Case 6.—S. R. Woman, aged 65. Spontaneous detachment of ten days' duration in left eye, extending

from above over macular region, reducing vision to counting fingers at three feet. A single tear was found about 1½ millimeters in diameter, axis 90, and was localized 22 millimeters behind the limbus. Operation: The superior rectus muscle was detached and the point of cautery was found to be just at the edge of the insertion of the superior oblique muscle. Here two cauterizations were done. After two weeks it was found that the cautery scar was one-half millimeter diskward to the hole, having just missed it. By means of the scar, however, the retina had become tacked on at this point and the detachment had receded from the macular region, the visual result being 10/10 and J 1. This case is still under observation and it may be necessary to operate again.

* * *

CASE 7.—Man, aged 58. Retina detached in its lower half, extending up to the macular region. Vision was reduced to 2/10. Duration of detachment, two months. Patient has nephritis. A retinal tear was discovered at 2 o'clock near the ora serrata. Single ignipuncture was done, but the scar was found to be one and one-half millimeters below the tear. After one month another ignipuncture struck the hole, but did not completely fill it and there was a small new tear at the border of the second scar. It was therefore deemed advisable not to operate any further. There was no improvement of the detachment and vision was reduced to seeing of hand movements.

* * *

CASE 8.—Woman, 68 years old, both eyes having had cataracts extracted elsewhere by the Barraquer suction method. The right eye was atrophic, and the left eye showed a large detachment below, extending over the macular region. Duration of detachment, ten months. Vision, right, amaurosis; left, light perception only. No hole could be found. Ignipuncture was done in the hope of possibly improving the detachment, as patient was blind and no vision could be lost. As the result of the operation the detachment appeared a little flatter and patient was able to occasionally distinguish hand movements.

* * *

CASE 9.—E. B. Aged 32. Intra-ocular steel had been extracted elsewhere with the hand magnet by the posterior route. Retinal detachment reduced vision to seeing of hand movements only. Duration, two months. A retinal tear was visible two disk diameters nasal from the optic nerve head. Ignipuncture done, striking the tear. Retinal detachment and vision was worse, however, following the operation. The fact of there having been a perforating injury and the presence of a vitreous band made the prognosis very poor in this case, and one comes to the conclusion that this type of case should not be operated upon. Vision after the operation, light perception only.

* * *

CASE 10.—D. R. Woman, aged 62. Senile detachment; duration six months; almost total. Vision, light perception only; questionable hand movements. Hole in the retina found at 9 o'clock near the ora serrata. Ignipuncture done and hole was struck. In spite of this there was only slight apparent improvement in the detachment, which makes one suspect that there were multiple holes which could not be found. Vision improved to questionable counting of fingers.

* * *

CASE 11.—J. D. Man, aged 32. Retinal detachment as result of trauma four months previously. Vision, counts fingers at two feet. Ignipuncture was done, and ophthalmoscopic examination make it appear that the hole had been struck. There was, however, no change in the detachment. There were in this traumatic case either multiple tears or vitreous bands and retinitis proliferens, which prevented reattachment. Vision unchanged. No effect of operation.

490 Post Street.

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DISCUSSION

M. F. WEYMANN, M. D. (2007 Wilshire Boulevard, Los Angeles).—The rôle of the retinal tear in detachment of the retina is still a matter of hypothesis. Even at present, with the method of Gonin occupying the center of attention, cures of retinal detachment are being reported by the repeated subconjunctival injection of cyanide of mercury as practiced by Sourdille; by the colmatage of La Grange; and by cauterization, either chemical or thermal, of the sclera, without actually sealing the retinal tear.

In one patient treated personally by the method of colmatage a reattachment was obtained which lasted three months, detachment recurring following the lifting of a heavy object. This operation is worthy of trial, particularly in eyes where no tear can be found. My own experience with ignipuncture has yielded unsatisfactory results, but the three times which I have operated have involved eyes of elderly patients which were nonmyopic and where preceding small vitreous hemorrhages had occurred. From a survey of cases reported a general impression is obtained that with ignipuncture the best results follow operation in young individuals, particularly where the detachment is associated with myopia; and that the poorest results are obtained in elderly nonmyopic eyes afflicted with degenerative changes.

*

W. H. ROBERTS, M. D. (65 North Madison Avenue, Pasadena).—Since Gonin read his paper on this subject in Amsterdam in 1929 a new field of ophthalmic surgery has opened.

Doctor Barkan is certainly to be congratulated on his remarkable percentage of cures. Most surgeons report an appalling series of failures, and therein lies a warning. This operation should only be attempted by a very skillful operator and only after the most painstaking search for and exact localization of the retinal hole. It is necessary for the success of the cautery operation that this hole be closed by the cautery. In the operation advocated by Lindner-Guist this does not seem so essential. They advise numerous trephine openings not quite perforating the sclera, the number depending on the extent of the detachment. The openings are touched with the dry tip of a potassium hydroxid pencil, washing with saline solution and neutralization with one per cent sterile acetic acid. Then some of the openings are punctured to allow the subretinal fluid to escape.

This operation also requires great skill and patience and should only be attempted by surgeons possessing sufficient skill, for "fools rush in where angels fear to tread."

*

A. RAY IRVINE, M. D. (1142 Roosevelt Building, Los Angeles).—There has been no work done in ophthalmology recently to attract such universal attention as has this new treatment for retinal detachments. We are therefore indebted to Doctor Barkan and his associates for this paper. I am rather pessimistic about the final outcome of most of these cases, however. I am confident that a fair number of permanent reattachments can be secured in early selected cases. We are sure that many cures have been reported on eyes which have later shown detachments at other points than the original where the ignipuncture was done. In these cases it is not hard to believe that, while a reattachment holds at the site of the puncture, the subsequent retraction of the vitreous body, due to the cauterization, is responsible for the later detachment, sometimes far removed from the original lesion.

The importance of quiet and hospitalization of all cases after operation for a period of two weeks cannot be overestimated. I am sure that it would be better in every large city or section to select one or two ophthalmic surgeons for this special work. Experience in special technique and localization of tears may make the difference of success or failure in these cases. Doctor Barkan is to be congratulated on the good results obtained in his cases.

❋

Doctor Barkan (Closing).—At the time that this paper comes back to me to close the discussion, several developments in the operation for retinal detachment have taken place which may be briefly stated as follows:

The attempts by Sourdille, Lindner, and Guist to cause broad adherence of the retina by chemical means have, in our opinion, been improved upon and superseded by the electrical methods of Safar of Vienna, Weve of Utrecht, and Larson of Stockholm, and we have been able to convince ourselves through personal experience of their efficacy. By these methods a broad area of retinal adhesion is obtainable and the retinal tear can be walled off or closed with a high degree of probability, thereby obviating the need of the very exact localization and actual striking of the tear which is essential in the method of Gonin.

We wish to thank Doctors Weyman, Roberts, and Irvine for their courtesy and for the interest which their discussions have added to this paper.

ELECTROCARDIOGRAPHIC FINDINGS IN CORONARY ARTERY DISEASE*

By Robert W. Langley, M. D.
Los Angeles

Discussion *by J. F. Anderson, M. D., Los Angeles; William Dock, M. D., San Francisco; Arthur Stanley Granger, M.D., Los Angeles.*

It would be difficult indeed to evaluate the importance of the progress made in the study of diseases of the coronary arteries by means of the electrocardiograph during the last two decades. The numerous contributions to our knowledge on this subject depict a most interesting story of the advancement of science and the perfection of diagnosis of a disease until recently unrecognized.

CONTRIBUTIONS RECORDED IN LITERATURE

As early as 1909 Eppinger and Rothberger [1] described alterations of the QRS and T-waves, caused by destroying part of the left ventricular musculature by silver nitrate.

In 1920 Pardee [2] reported an electrocardiographic sign of coronary artery obstruction which has become the most characteristic and popularly accepted criterion for the graphic diagnosis and includes a V-shaped inversion of the T-wave; low amplitude of the ventricular complexes; a high take-off and a peculiar arching of the T-wave. Other significant abnormalities frequently found include: a widening of the QRS complex associated with notching or splintering, and an increase in the AV conduction and the development of the prominent Q-wave in Lead 3 as described by Brown, Levine, and Pardee. These observations have, to a large extent, been confirmed by Smith,[3] Willius,[4] Wearn,[5] Levine,[6] Wiggers,[7] Barnes and Whitten,[8] and particularly by Parkinson and Bedford.[9] Barnes [10] has pointed out that T-wave negativity could result not only from coronary arteriosclerosis, but from various injuries to the myocardium, the result of strain predominantly of either the right or the left ventricle; also that such strain need not be manifested in the myocardium except as hypertrophy or dilatation of one or the other ventricles. It was further established by these same workers that strain predominantly of the left ventricle was associated with inversion of the T-waves in Lead 1 or Leads 1 and 2; strain predominantly of the right ventricle with inversion of the T-waves in the combined Leads 2 and 3. More recently Barnes and Mann [11] have established by animal experiments that probably the left and right ventricles act as separate units, as far as the effect on the RS-T segment of the electrocardiograph is concerned.

Parkinson and Bedford found deviations of the RT and ST segments occurring early in most cases of one hundred studies of coronary thrombosis, and also found a negative T wave following later during the course of the illness. The RT and ST elevations and depressions were best seen in the first and third leads and were opposite in direction. The T-wave in some cases became evident before the RT segment returned to the iso-electric line, in which case the direction of the T-wave was always opposite to that of the RT segment. They further found that within two or three weeks after the onset of infarction the RT segment had usually returned to the iso-electric level and the T-waves were fully developed in all leads.

PITFALLS

Our knowledge of the graphic interpretation of coronary disease has been rapid but not without many pitfalls. There has frequently been a tendency on the part of overenthusiastic physicians to read too much into the cardiographic records on the one hand and to pay too little attention to the history and clinical findings on the other. It should be emphasized that the history still remains the most important aid to prognosis, and even treatment in many cases.

One must be particularly guarded in making the statement that coronary artery disease is not or has not been present from merely reading one electrocardiogram. This point is well brought out by Levine and Holland,[12] who report a study of 328 cases of coronary occlusion, with only thirty-five showing normal tracings at one time or another following the acute attack.

The variability of the character of the tracings is brought out by these men and is well known to all cardiologists who are able to have daily or frequent electrocardiograms taken during the acute and subacute stages of an occlusion. Some cases may show no changes in the tracings during the first twenty-four or even forty-eight hours of an acute coronary obstruction, but show quite marked

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* Read before the joint meeting of Pathology and Bacteriology and General Medicine sections of the California Medical Association at the sixty-first annual session, Pasadena, May 2–5, 1932.

and characteristic ST and T-wave abnormalities within a week. On the contrary, however, most cases will show marked changes at the onset, with a return toward normal on improvement in the patients' condition.

Many and various cardiac irregularities may be associated with the more characteristic findings above described, and in this series several cases of complete heart-block associated with an acute coronary thrombosis are shown. Other of the more common types of irregularities occur frequently.

In 1929 I [13] reported several cases of acute coronary occlusion wherein the T-waves had been restored to the normal upright position over a period of time. Some of these patients are still showing changes from time to time several years after the original trouble. These minor changes which are prone to undergo changes must not be looked upon too lightly, nor should we disregard the slight abnormalities wherein the patient gives a suggestive history or is complaining of slight precordial pain.

The fact that cardiac infarction may occur in the so-called silent areas of the heart muscle led Wolferth and Wood [14] to report their results in two cases of acute coronary occlusion diagnosed clinically but unsatisfactorily shown by electrocardiographic tracings, except for the appearance of abnormalities in a chest lead which they term Lead 4. Following the technique they used, several patients with known coronary sclerosis were reëxamined for abnormalities in Lead 4 in this series. These results were not significant in that no definite abnormalities of importance were found in cases where deviations had already been found in the standard leads.

In a recent report Levy [15] submits an interesting analysis showing the percentage of cases diagnosed as coronary artery disease in relation to the total number of admissions to the medical service of the Presbyterian Hospital of New York City from 1920 to 1929, inclusive. In 1920, of 1886 cases admitted to the medical service of the hospital, twenty, or 1.1 per cent, were diagnosed as coronary artery disease. In 1929, of 2198 cases admitted, ninety-four, or 4.3 per cent, were diagnosed coronary artery disease. The average incidence during the ten-year period was 2.1 per cent.

CASES REPORTED IN THIS SERIES

The cases in this series represent 139 cases of coronary disease selected from 1,000 cases of heart disease seen in office practice or in consultation, and include arteriosclerosis of the coronary artery, thrombosis of the coronary artery, and those cases diagnosed as angina pectoris wherein the electrocardiographic evidence seemed to indicate that coronary disease was the probable pathologic factor. The incidence of the disease in this group is only 1.39 per cent. It must be pointed out, however, that these cases were, on the whole, taken from a group of ambulatory patients, while Levy's report deals with bed patients.

ANALYSIS OF CASES REPORTED

Two hundred and fifteen abnormalities were found in 139 records:

Inversion of T wave in all leads	42
Inversion of T wave in L2 and L3	37
Inversion of T wave in L1 and L2	12
Inversion of T wave in L3 alone	5
Inversion of T wave in L1 alone	2
Inversion of T wave in L2 alone	0
Inversion of T wave in L1 and L3	1
Prominent Q wave in L3	10
Interventricular block (arborization)	38
Complete heart block	6
A-V block	8
Right bundle branch block	8
Left bundle branch block	1
Paroxysmal tachycardia (vent)	4
Auricular fibrillation	6
Auricular flutter	1
Splintering of the QRS complex	5
Ventricular premature contractions	5
Left axis deviation	33
Right axis deviation	1

CONCLUSIONS

An analysis of the electrocardiographic abnormalities in 139 cases of coronary artery disease is given.

The presence of the so-called coronary T-wave and other criteria ordinarily accepted are not always necessary in order to make a diagnosis of coronary artery disease.

The most important clinical evidence of pathology in the coronary arterial system is frequently to be found in the alterations occurring in the electrocardiogram.

An accurate prognosis is not always possible, but important prognostic signs can be gathered by studying a series of electrocardiograms taken frequently on the same patient.

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DISCUSSION

J. F. Anderson, M. D. (1930 Wilshire Boulevard, Los Angeles).—I wish to emphasize a few of the points that Doctor Langley has made. In the first place, the importance of not making a diagnosis on an electrocardiogram alone. In some cases it is possible to make a diagnosis on the tracing, and in some it is possible to do so on clinical findings and history. But in either method a grave error may be made. Infections and intoxications may give similar electrocardiographic findings, and symptoms may be misleading. It is by combining the two that by far the best results are obtained. In this case we can often diagnose coronary sclerosis before thrombosis occurs, and by careful management at least postpone a more serious condition. The most valuable findings in the chronic coronary disease are: intraventricular block, as evidenced by widening of the QRS interval beyond .1 second, and bundle-branch block. In the acute cases the earliest and most characteristic finding in the electrocardiogram is displacement of the RT segment. It will take off high on the R in one or two leads, and low on the S in the other lead, or vice versa. This change may be seen in only a few hours after the attack. It is, in turn, followed by the T-wave changes. I think it would be well also to emphasize the fact that the electrocardiographic changes may be slight and may not extend through a long period of time. Thus one normal tracing after an attack, the symptoms of which suggest coronary thrombosis, does not necessarily mean that the patient does not have a coronary occlusion. It is rare indeed, however, that several tracings are negative when the trouble is really present.

There has been much discussion lately about the significance of the large Q-wave in Lead 3. Due to confusion in nomenclature, two main types of complexes are described. In the first place, an inverted R3 (S3) is shown as the large Q, when the application of Einthoven's equation readily identifies it as the former. Thus the tracing shows left-axis deviation, which is significant only if it denotes left ventricular preponderance.

The second type is a diphasic QRS in which the initial phase is directed downward. This variety may become monophasic, however, with respiration, termination of pregnancy, or loss of weight. Occasionally a tracing with normal axis deviation and a large initial downward phase is shown. When found a large Q3 is most frequently seen in cases of coronary disease and left ventricular abnormality. The cause or mechanism of production, however, has not yet been determined. The latest investigators are inclined to the belief that change in the anatomical position of the septum has more to do with its production than deficient blood supply, or myocardial damage.

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William Dock, M. D. (Stanford University Medical School, San Francisco).—There is nothing I can add to Doctor Langley's paper or Doctor Anderson's discussion of the electrocardiographic findings in acute myocardial infarction. It must be emphasized that the string galvanometer is an instrument exactly like the stethoscope in that it extends the examiner's powers of physical examination. Unfortunately it is more expensive than the stethoscope, but in practice it should be used, like the stethoscope, as often as necessary. In cases of typical coronary occlusion it is not necessary to think of the electrocardiogram just as it is not necessary to listen to the heart of a typical case of aortic insufficiency with bobbing neck vessels and a Corrigan pulse. However, most of us still enjoy seeing typical "coronary" tracings or hearing aortic diastolic murmurs. In cases where the diagnosis of coronary disease is doubtful, and where a correct decision is of vital importance, the taking of frequent tracings usually is of great value in furnishing a definite solution of a problem which no other form of physical examination could solve.

Arthur Stanley Granger, M. D. (2007 Wilshire Boulevard, Los Angeles).—It will not be amiss to lay a little more stress on one or two points which have been mentioned in Doctor Langley's paper and emphasized by both Doctor Anderson and Doctor Dock in their discussions. We must remember that a very large percentage of patients presenting symptoms of angina pectoris and who, we must assume, have definite coronary disease show absolutely normal electrocardiographic tracings. Many of us have seen such patients turned aside with the diagnosis of either neuritis or neurosis, and at least one or two of them, in my experience, have later died of coronary occlusion. Again, some of the electrocardiographic signs, which are commonly found in coronary disease, may be due to other conditions. Consequently it is essential that we do not rely on the electrocardiograms alone as a means of diagnosis, but try to correlate the electrocardiographic signs with a careful history of the condition together with the physical findings, and in some instances it is necessary to make the diagnosis from the history alone. I am always suspicious of coronary disease in a patient presenting the type of pain which is commonly seen in that condition despite the absence of any positive signs, and in case of doubt it is far better to be mistaken in one's diagnosis than to err in the opposite direction.

ECZEMA—OBSERVATIONS ON DESENSITIZATION*

By Philip K. Allen, M. D.
San Diego

Discussion *by Ernest D. Chipman, M. D., San Francisco, George Piness, M. D., Los Angeles; Albert H. Rowe, M. D., Oakland.*

THE present-day treatment of eczema or dermatitis eczematosa has been radically influenced by the newer concepts of the pathogenesis of this condition. Recent knowledge on this subject points strongly to the conclusion that eczema is not a metabolic disease, but is in the main an allergic one, in the sense that it represents a reaction of a sensitized group of cells to one or more specific excitants. Although it was long believed that sensitization to protein substances was necessary to the production of allergic reactions, we have learned that a reaction of the epidermis, with the production of clinical eczema, may be precipitated by contact with nonprotein substances which are harmless to the normal individual.

As a matter of fact, wide clinical experience shows that sensitivity to exogenous nonprotein substances is the predominant factor in the specific etiology of adult eczema,[1] and that endogenous proteins, such as foods, play a relatively unimportant rôle.[2] In short, the presence of clinical eczema in an individual is strongly indicative of a specific hypersensitiveness of the epidermal cells to an external excitant. It is not within the scope of this paper to present the proofs of this assertion, and the bald statement will have to be supported by references to the above representative articles from the voluminous literature on the subject.

It was the persistent search for endogenous proteins as a specific etiologic basis for eczema that

* Read before the Dermatology and Syphilology Section of the California Medical Association at the sixty-first annual session, Pasadena, May 2–5, 1932.

was largely responsible for the early poor success of the allergist and dermatologist working this field.

DIAGNOSIS AND TREATMENT

In the diagnosis, the functional or patch test with suspected external irritants has largely replaced the scratch and intradermal protein tests. This method has proved an invaluable aid in the determination of previously obscure dermatitides.

In the treatment, such nonspecific contributory factors as focal infection, constipation, endocrine disturbances, "nervousness," etc., although treated when present, deserve only secondary consideration. The hope of complete and permanent cure logically lies in discovery of the basic etiology and specific therapy against it. Obviously, specific therapy consists in removal of the excitant or, if this is impracticable, in desensitization against it.

SENSITIZATION

In a discussion of desensitization, its antithesis, sensitization, demands at least brief consideration.

In spite of the uniformity of clinical characteristics in dermatitis eczematosa, etiologic and immunologic findings demand a recognition of two more or less well-defined groups.

The first, and larger, of these includes the cases of "contact dermatitis," formerly known as "dermatitis venenata." This group, of which the eruption caused by poison ivy is typical, represents a reaction of the intact skin to contact with substances usually of nonprotein nature. Sensitization to these substances usually does not result in the formation in the blood stream of demonstrable antibodies.[3] Hypersensitiveness in this group is apparently not subject to hereditary influence as is shown by the fact that a large percentage of individuals may be sensitized by sufficient exposure to an eczematogenous substance and that this percentage varies with the nature of the excitant (orthoform, 45 per cent; ivy, 65 per cent; primrose and nickel salts, 100 per cent).[2] Although individual predisposition probably plays a part in this type of sensitization, the capacity to become specifically sensitized appears to be common to all skins to a greater or less degree.[4] Therefore the production of such a hypersensitiveness seems to depend on one main factor—sufficient exposure to a strongly eczematogenous substance.

The second and smaller group of eczemas is composed of those cases belonging to the asthma-hay fever-eczema complex, variously designated as "allergic state," "atopy," "true allergy," or "primary allergy." They usually represent a hypersensitiveness to foreign proteins, and are subject to a definite hereditary influence.[5, 6] The sharp segregation of this group is demanded by the fact that the blood stream in these individuals regularly contains circulating antibodies specific for the antigen. These antibodies may be demonstrated by the well-known Prausnitz-Küstner method of passive transfer. Bloch states, "Without doubt all forms of idiosyncrasy in which a clear Prausnitz-Küstner reaction is obtained, and are therefore incontestable antigen-antibody reactions, belong to one special group." Since for purposes of discussion a specific term is necessary to differentiate this group, the term "atopy" as suggested by Coca[7] will be used here. The term applies only to those individuals who show predisposition, usually inherited, to protein sensitization and in whom free antibodies can be demonstrated for a specific antigen. Concerning these free antibodies, Coca[8] remarks, "Their constant presence related to the excitant in hay fever, the so-called 'sensitive' group of asthmatics, and in some cases of atopic eczema, point to these bodies as the actual mechanism of the hypersensitiveness." The immediate (wheal) reaction to a protein with the scratch or intradermal test, or the demonstration of specific blood antibodies, is far from conclusive proof that the protein is the direct cause of the eczema. The wheal reaction is not eczema, and represents a reaction of a group of cells different from those concerned in eczema. The existence of such an entity as "atopic eczema" has been seriously doubted by many observers and is still the subject of controversy. However, whether the eczematogenous effect of proteins is a direct or an indirect one, the prevalence of eczema in atopic individuals leaves little doubt that endogenous protein substances may play a part in its production.[6] This is especially true in children.

In attempting desensitization in this atopic group, two very important points must be borne in mind:

1. The individual has a hereditary predisposition to protein sensitization.

2. The presence of circulating antibodies with the possibility of a severe constitutional reaction requires extreme caution in injecting the antigen.

Although eczematous sensitization to silk is not as rare as might be supposed,[9] the following case is unique in many respects. At first glance it seems to fall definitely within the second or "atopic" group.

REPORT OF CASE

A white male, age twenty-two years, presented an itching erythemato-squamous eruption with thickening of the skin, largely confined to the face and flexural surfaces. The upper lip, antecubital fossae, the back of the neck, and a circumscribed area on the wrist showed lichenification and fissuring. The clinical picture was essentially one of "chronic eczema."

There was a definite history of allergic disease on the paternal side. His father had asthma (horse) and eczema. A paternal aunt had asthma, from which she died, and was known to be sensitive to roses.

The patient first experienced eczema during infancy. It disappeared and recurred at irregular intervals until the age of fifteen, when it became severe and refractory to all treatment employed. Since that time the condition had become progressively worse.

Significant in the patient's history was the total absence of any manifestations of asthma, hay fever, or urticaria.

Physical examination disclosed no abnormalities beyond the skin eruption. The laboratory findings were essentially negative.

A large series of contact and percutaneous skin tests with protein and nonprotein substances showed a reaction to only one substance—silk. The reaction to silk was strongly positive with both methods. The response to the patch test was particularly interesting. Irrespective of the silk material used (sized or unsized, dyed or undyed), an erythematous pruritic area would develop within a few hours. Such a contact reaction could not be elicited, however, by prolonged exposure

to silk protein extracts obtained from two different pharmaceutical concerns. The presence in the blood of antibodies specific for silk protein, as contained in these extracts, was shown by repeated passive transfer by the method of Prausnitz-Küstner. The passively sensitized "substitute," however, showed a positive reaction to the scratch and intradermal tests only, and did not react to the patch application.

This patient had realized for some time that contact with silk irritated his skin, and, although he had not associated this fact with the persistence of his eczema, had largely discontinued the wearing of silk clothing. The admonition to avoid all silk clothing and contact with silk resulted in no appreciable clinical improvement.

The fact that only one antigen was discovered is by no means proof of the fact that we were dealing with a monovalent sensitization. Retesting with previously used and additional substances, however, failed to give any other positive reactions. It seemed conceivable that in an individual sensitive to silk, indirect contact with the substance could perpetuate the eruption. As avoidance of such indirect contact seemed impossible, desensitization was undertaken.

An initial desensitizing dose of one minim (.06 cubic centimeter) of a 1:10000 solution of silk protein extract was given subcutaneously. This was followed in twenty minutes by a constitutional reaction together with a marked focal reaction manifested by extreme pruritus and sudden exacerbation of all existing eczematous lesions. An interesting observation was the appearance at this time of urticaria and asthmatic symptoms, conditions of which the patient had never complained.

For two days after the reaction the eczema was markedly improved, the patient stating that his skin was better than at any time during the past five years.

The dosage was greatly reduced, subcutaneous injections being given at four to five-day intervals in gradually increasing amounts. The skin showed definite progressive improvement until a "tolerance level" to injections was reached. This level of tolerance remained remarkably constant, at five to five and one-half minims of a 1:1000 solution of freshly prepared extract. Exceeding this amount invariably resulted in a constitutional reaction, irrespective of how slowly the dose was increased or the time interval between injections.

Although there had been no change in occupation or environment and no local treatment had been given besides cold cream (which he had been using for years), there was marked clinical improvement at this stage. The eruption had entirely disappeared from the majority of areas involved. There remained, however, thickened, somewhat reddened, areas of the upper lip, the neck, and volar surface of the right wrist. There was also occasional itching of these areas. The patch test with silk material to an area of the back which had never been eczematous was now negative after twenty-four hours of exposure. The areas which had previously been involved still reacted to contact with silk, as shown by a localized dermatitis of the patient's face after sleeping on a satin pillow or contact with his wife's silk dress. No change was noted in the capacity of the blood serum to sensitize normal skin.

The inability to produce a higher degree of tolerance after eight months of subcutaneous injections prompted the intradermal administration of the extract. This was suggested by the observation of various investigators who noted better results with this method.

Daily intradermal injections were started with a 1:500 solution of the same extract. Only a minute amount of the solution was given at each injection, which, however, proved sufficient for the production of an immediate wheal reaction. Improvement with this type of therapy was rapid. At the end of four weeks of intradermal injections the entire skin was essentially normal. Itching and erythema had entirely disappeared, and there remained only slight thickening of the skin at the sites of the previous chronic involvement.

The patch test with silk material was now found to be negative in all areas. However, there was still no demonstrable reduction of antibodies as shown by a clear Prausnitz-Küster reaction at this time. There was also no diminution of wheal reaction to intradermal injections of silk protein.

We are forced to the conclusion that the patient has not been desensitized in the strict sense of the word, but is still "atopic." All we have accomplished, evidently, is hyposensitization of the epidermis to the point where it no longer reacts to the usual external contact with the excitant. The therapeutic requirements have been fulfilled, however, in a clinical "cure."

COMMENT

This case presents many interesting features, most of which cannot be discussed here.

Although a specific reaction was obtained to intradermal tests with silk protein extracts, it seems highly probable that some portion of silk material other than the protein itself was the immediate cause of the eczema. The active eczematogenous principle has not as yet been identified, but the reasons for such a conclusion are as follows:

1. The patch test, although positive with silk material, was negative with silk protein extract.
2. Normal skin passively sensitized with antibodies specific for silk protein failed to give a positive reaction to patch tests with silk material.
3. Apparent immunity to contact with silk material has been established in spite of an undiminished antibody reaction to silk antigen.

We have merely demonstrated, therefore, the existence of contact dermatitis in an atopic individual. Although the excitant for both the epidermal and atopic reactions was silk, we have not proved the protein fraction to be the cause of the eruption, nor the existence of such an entity as "atopic eczema."

A parallel example has recently been reported by Brown, Milford, and Coca[10] in a case of hay fever with eczema, both symptoms being due to hypersensitiveness to ragweed pollen. It was definitely established that the protein excitant of the hay fever did not cause the eczema, but that the latter was produced by the nonprotein pollen oil.

This reasoning changes our ideas concerning the specificity of the desensitization with the protein extract. What we had at first presumed to be specific therapy was probably nonspecific for the eczema. Yet this form of treatment was followed by marked clinical improvement.

We have long known that hyposensitization in the human is not analogous to anaphylactic desensitization in lower animals.[11] In the latter, immunity is established by specific neutralization of the antibodies and is readily accomplished. In the human this has been shown not to be the case. Attempted desensitization in atopic individuals does not result in a decrease in the blood antibodies (Coca).

The clinical manifestations of atopy are not due to the mere presence of free antibodies, but demand a hypersensitive or atopic state of the shock organ as well. Since antibodies have been demonstrated in the absence of clinical symptoms,[12] as well as after therapeutic hyposensitization, the beneficial results of treatment in these cases must be attributed to changes in the shock organ.

Whether this altered response of the shock organ is due to a local neutralization of fixed antibodies or to exhaustion of its capacity to react is still an unsettled question.

The apparent advantage of the intradermal over the subcutaneous injections is an interesting one. Sulzberger and Wise [13] recommended this method after successful treatment of a case of ragweed dermatitis. Thommen [14] reports that intradermal injections with pollen extracts in hay fever have proved "decidedly superior" to the subcutaneous method. Phillips [15] reported excellent results with this method and made the interesting observation that the clinical improvement was not dependent upon the amount of antigen injected, but upon the degree of local reaction produced.

A rational explanation of these results is seen in the recent work of Storm van Leeuwen.[16] He has shown that a specific antibody-antigen reaction in the skin reduces the hypersensitiveness to other allergens, and that this nonspecific hyposensitization is directly proportionate to the degree of local reaction produced. This effect was not obtained with wheal reactions to histamin, and the author concludes that the specific reaction has liberated an "intermediary substance," which is an essential factor in hyposensitization. In other words, a substance produced by the interaction of antigen and antibody in the skin is an important element in human hyposensitization.

If this is true, and if epidermal sensitization as encountered in eczema is based on the same mechanism as that of other forms of allergy, we are furnished with an invaluable method of treating eczema in atopic individuals. Further work on this problem is now in progress and will be the basis of a subsequent report.

The immense field opened for this type of therapy is at once obvious. Although the determination of the actual excitant in eczema has been materially aided by the use of the patch test, there still remains a fair percentage of cases in which the exciting substance eludes detection or, if found, cannot be removed.

Specific desensitization has, on the whole, been particularly disappointing in eczema. This may be due, as Bloch suggests, to the tenacity with which the antibody is fixed to the epidermal cell. However, if a prime factor in the process of hyposensitization is the formation of an intermediary desensitizing substance, it is readily seen that the uncomplicated case of contact dermatitis is denied the benefits of this mechanism. It is generally agreed that specific blood antibodies are usually not produced for nonprotein eczematogenous substances. The extract of poison ivy or poison oak may, therefore, be injected subcutaneously or intradermally without the production (except in rare cases) of a constitutional or local reaction.

Theoretically, therefore, such nonspecific hyposensitization of the epidermis requires the existence of an atopic terrain. In such an individual the determination and intradermal injection of a specific atopen should have a nonspecific desensitizing effect on the epidermis irrespective of the nature of the excitant.

I believe that the results obtained in the case reported are far better than those usually seen in attempted specific desensitization in eczema. Since the treatment used was probably nonspecific for the epidermal hypersensitiveness, the explanation of these results may lie in some such mechanism as outlined.

SUMMARY

A case of intractable eczema due to silk is reported in which circulating antibodies specific for silk protein were demonstrated.

The identity of the silk atopen and the skin irritant seems highly improbable.

Injections of silk protein extract (although probably nonspecific for the eczema) were followed by clinical "cure."

Intradermal injections with the production of a local reaction seemed to be more effective than those given subcutaneously.

Such therapy may prove valuable in the nonspecific treatment of eczema occurring in atopic individuals.

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DISCUSSION

ERNEST D. CHIPMAN, M. D. (2000 Van Ness Avenue, San Francisco).—Doctor Allen's paper opens a wide field for discussion which may follow specific or general lines.

Specifically we have to deal with a patient who had an intractable eczema, who reacted to silk when the patch test was employed, but in whom patch tests with silk protein extract were negative. This patient,

however, was cured by the injection of silk protein extract.

It is intimated that these injections were nonspecific for the eczema, and reference is made to the work of Storm van Leeuwen in which it was shown that a specific antibody-antigen reaction in the skin reduces the hypersensitiveness to other allergens.

This case report is of value because it emphasizes the fact that not all allergic reactions are of protein origin and especially because it opens up to our imagination valuable therapeutic possibilities through nonspecific hyposensitization.

In a general sense this paper is of value because of its forthright position in the etiology of eczema. The statement that "sensitivity to exogenous nonprotein substances is the paramount factor in the etiology of adult eczema and that endogenous proteins, such as foods, play a relatively unimportant rôle" should be carefully taken to heart by all of us.

Tradition is tenacious and we part with our deeply rooted notions only after violent struggles. May we ever put over the concept of an eczema that is not even remotely related to the ultimate fate of the protein molecule? May we ever convince the followers of high and holy tradition that because shrimps cause hives in one person no subject of skin disease may eat food from the salt sea? May we ever establish faith in the principle that when dealing with a dermatitis of unknown origin we shall spend our time to better advantage in searching external contacts than in ordering starvation diets or multiple laboratory tests?

If one feels pessimistic about eczema let him ponder over the implications of this paper and be of good cheer.

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George Piness, M. D. (1136 West Sixth Street, Los Angeles).—There is one statement of Doctor Allen's to which exception must be taken unless it be modified and that is, "Wide clinical experience shows that sensitivity to exogenous nonprotein substances is the predominant factor in the specific etiology of adult eczema, and that endogenous proteins, such as foods, play a relatively unimportant rôle." In the first place, it must be emphasized that Doctor Allen speaks of adult eczema, thereby intimating that his statements do not apply to infantile eczema and that adult eczema always differs from infantile eczema in its etiology. This is too broad a statement to leave unchallenged, for many cases of adult eczema undoubtedly belong to the same type or group as infantile eczema and are due to the reaction of endogenous proteins on an allergic individual. Undoubtedly a goodly number of adult eczemas, so-called, are due to contact with exogenous substances, but overemphasis of this fact would leave undiagnosed many cases which can only be recognized by the use of protein skin tests.

The diagnosis of eczema or dermatitis should be made before testing is done, and can be made from the clinical history and character of the lesion. The etiology may then be determined by means of skin testing as Doctor Allen discussed fully in his paper. In our experience all methods are valuable, but one must not be too dogmatic in advising any single one of these methods as being the best. Each of them has a definite place. In the dermatitis due to nonprotein substances we advocate the patch test, and suggest its use also in the forms of dermatitis due to local contact with substances of protein nature, such as is seen on hands of cosmeticians working with orris root, henna, bran; the grocer who handles cereals, etc.; and many other occupational types, as baker, housewife, etc. But our experience over a period of years has taught us that the endogenous group rarely react by the patch test; instead, however, they give excellent and characteristic reactions by the scratch or intracutaneous methods of testing. Again I wish to reiterate that one must not become overenthusiastic over a single method; all of them are valuable aids in assisting us in determining the etiology of dermatitis or eczema when used on properly selected cases.

The case reported by Doctor Allen is not uncommonly seen in a large allergic clinic, and it is to be expected with such a history that the individual should react to silk by any method of testing. In other words, given a sensitive individual tested with a specific protein to which he is sensitive a positive skin reaction will result.

Treatment with specific antigens gives excellent results in most cases of dermatitis due to protein sensitivity, provided proper dosage is given at intervals sufficiently far enough apart to avoid constitutional reactions. The case reported obtained excellent clinical results which may be permanent. However, one must not be too optimistic as it is possible that the individual's tolerance may be broken down again in the future.

The point brought to our attention in this case was the absence of respiratory allergic symptoms. This is characteristic of the allergic dermatitis of the contact type.

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Albert H. Rowe, M. D. (242 Moss Avenue, Oakland).—The relative importance of exogenous as compared with endogenous proteins in the eczema of adults is reversed in infancy as Doctor Allen has mentioned, since most eczema in the first years of life is due to food allergy. My experience, however, still emphasizes the importance of considering ingestants as a cause of eczema in adults and consequently points to the advisability of routine scratch tests followed by intradermal tests with all types of inhalants and foods which have failed to react by the scratch test. Diet trial is also of great value in negative reactors in the diagnosis of food allergy and to determine the true significance of positive food tests. Eczema due to food allergy may be localized and suggestive of contact allergy as exemplified by such eczema, due to wheat, milk, and eggs, of several years' duration on the face of a woman. This patient, moreover, failed to react to these food allergens, and her diagnosis was made through diet trial with elimination diets. The necessity of recognizing food allergy in dermatitis in all ages has been stressed in Urbach's recent book.

But eczema in adults is most frequently due to contact or air-borne substances which can frequently be shown by routine scratch and intradermal reactions. Thus, a woman with a dermatitis all over the face, previously diagnosed lupus erythematosus, reacted intradermally to rose pollen. When she stopped burying her face in roses, which were constantly in her rooms, and received desensitization therapy to rose pollen, she was relieved. Many patients in youth and adult life have dermatitis on the face, neck, arms, and legs due to pollen allergy which can be demonstrated by skin tests.

The patch test should be freely used in the problems of dermatitis. When history suggests definite or unusual contact etiology, it may be used alone without resort to scratch or intradermal tests. Patch-testing should be persisted in with all substances with which the patient has any contact, especially if the other skin tests have not reacted or if such reactions fail to explain the difficulty. The foliage of shrubs, weeds, trees or flowers, and not their pollens, frequently cause eczema only demonstrable with patch-testing. A host of substances such as dyes, drugs, cosmetics, materials used as clothing or furnishings, soaps and occupational substances only react through patch-testing. As Doctor Allen points out, the main requisite for sensitization is sufficiently prolonged contact with such a substance.

Doctor Allen's discussion of his interesting case of silk dermatitis is worthy of study, and his success with intradermal treatment is stimulating to thought. I feel that subcutaneous therapy according to the accepted methods of administration of air-borne allergens might have been carried up to a higher dosage with continued therapy and that the same result, possibly more lasting, might thereby have been obtained. However, the value of intradermal therapy in contact dermatitis must receive more consideration in the future, especially in view of the author's suggestion that it may be nonspecific in part of its activity.

DOCTOR ALLEN (Closing).—I certainly do not wish to imply that protein hypersensitiveness can be ignored as a cause of eczema. The wheal reaction to the scratch or intradermal protein tests is not eczema and does not constitute conclusive proof of the eczematogenous effect of a substance. But it is unquestionable that an allergic reaction to proteins plays an important part in the production of some cases of eczema. Irrespective of whether the effect of such protein sensitization is a direct or an indirect one, it should be given full consideration in the approach to a case.

The point I wished to stress was the relative importance of external contactants in the production of adult eczema. As Doctor Piness has pointed out, I have used the qualifying term "adult" because I believe this type usually represents a different etiology from that concerned in infantile eczema.

True "atopy" seems to be an inherited characteristic and allergic symptoms may appear at birth or shortly afterward. Epidermal sensitivity to contact excitants, however, requires repeated exposure (frequently years) for its production. Therefore this type of reaction is seldom seen in infants. On the other hand, eczematous reaction to endogenous proteins as seen in infantile eczema tends to compensate spontaneously and usually disappears in childhood. Some individuals, it is true, carry an infantile eczema into adult life without remission, and cases of adult eczema have been reported so highly sensitive to a food that the ingestion of a minute amount would cause an eruption.

In the main, however, recent studies have given more and more importance to contact excitants in adult eczema at the expense of endogenous proteins.

X-RAY ASPECTS OF FUNCTIONAL DISORDERS OF THE COLON*

By HOWARD E. RUGGLES, M. D.
San Francisco

DISCUSSION *by R. G. Taylor, M. D., Los Angeles; Carl B. Bowen, M. D., Oakland; Charles M. Richards, M. D., San Jose.*

MOST writers on irritable colon emphasize the importance of the nervous element in its causation, and any extended experience with these patients confirms that impression. The nerve supply to the descending colon and sigmoid, which are the segments commonly affected, is intimately related to that of the pelvic organs, and both sympathetic and craniosacral fibers are distributed throughout the colon. The internal sphincter and adjacent colon are innervated from thoracolumbar fibers through the inferior mesenteric and the hypogastric nerves which latter are also an afferent path from the bladder and pelvic organs. There is also a cranosacral supply through the pudendal nerve. Sympathetic activity causes a relaxation of the internal sphincter and rectum and, to a less extent, of the sigmoid and descending colon. Craniosacral impulses have an opposite effect. Thus the appearance of the colon is a good index of the balance between sympathetic and parasympathetic systems, a large colon representing sympathetic preponderance and a small one lowered sympathetic or increased craniosacral activity. The extrinsic control of the bowel is well shown in the results of sympathectomy in cases of megacolon, interruption of the sympathetic innervation producing a striking contraction in the diameter and length of the gut.

COLON TYPES

The size and position of the colon varies with the type of individual. A stocky, heavy-set male, with a small hypertonic stomach and perhaps a tendency to high blood pressure, will usually have a large redundant colon, all evidence of a relatively active sympathetic system. In contrast, we find the thin asthenic person, more commonly a woman, with a large atonic stomach and a short, narrow colon lying in the iliac fossa, showing a low blood pressure, with frequent complaints of colon discomfort, attacks of diarrhea, and the usual story of an irritable colon.

These are the hyposympathetics, and perhaps adrenal cortex is what they need. The emotional element is strong and often based upon a background of fear, social or family conflicts, or even a sudden drop in the Dow Jones averages. Men seem to manifest nervous strain and exhaustion at the pylorus, women in their colons. "Old maids" of both sexes are apt to be constipated.

There is a definite reciprocal relation between the behavior of the ascending and the lower descending portions of the colon. We are all familiar with the great dilatation of the cecum which occurs in obstruction of the descending segment, and some recent studies in Chicago have shown that an increase of tone in the descending colon causes a direct relaxation of the ascending portion. Peristalsis in the ascending colon is often accompanied by shortening of the distal segments. The ascending colon appears to be a dehydrator and the site of bacterial and cellulose digestion. The transverse and descending portions accomplish additional dehydration and gradual onward propulsion of their contents.

HOW NORMAL COLONS VARY FROM DAY TO DAY

In following individual normal colons day after day, we have been impressed by the variability of the same colon in tone and motility and the influence of an adequate water intake. An ample supply of water in persons not accustomed to it means quicker evacuation of the cecum and a less tonic descending portion. It is interesting that in several of the female patients there was a striking evacuation of the transverse and descending colon beginning two days before the onset of menstruation. Doctor Stone at the University of California Hospital has recently demonstrated changes in the length and size of the colon by refilling the bowel after a first enema has been expelled. Dilated loops are found narrower and shorter and the whole tone of the gut is often increased at least temporarily.

X-RAY EVIDENCE OF COLON IRRITABILITY

The x-ray evidence of colon irritability is found in hypertonicity of the transverse and descending colon; in broad, deep and widely spaced haustral constrictions or a comparative absence of haustra. Occasionally in acute cases we see fine, closely spaced constrictions of unequal depth which prob-

* Read before the joint meeting of the Radiology and General Medicine Sections of the California Medical Association at the sixty-first annual session, Pasadena, May 2-5, 1932.

ably represent a temporary interruption of extrinsic control, a sort of local fibrillation. There may be delayed emptying (beyond seventy-two hours) or very rapid clearing. After enema the normal colon tends to retain about half its content; the irritable bowel may empty completely. In some cases with an unusual amount of mucus, thin strands of barium-covered mucus may be seen following evacuation of the bowel or after mass movements within it, the so-called "string sign."

Visualization by means of a barium meal gives a better idea of the natural tone and motor power of the intestine than an enema, although for the sake of completeness, an enema should conclude every colon study. A film twenty-four hours after the enema sometimes supplies useful information. The rate of filling by enema and the patient's reaction to it are of considerable importance in a final estimate of the case.

384 Post Street.

DISCUSSION

R. G. Taylor, M. D. (1212 Shatto Street, Los Angeles).—Doctor Ruggles has given a very good exposition of this difficult and rather nebulous subject. I should simply like to emphasize that a complete study, including observations of the opaque meal, and of the opaque enema, are probably needed in most patients. Even then definite deductions of value are frequently difficult. Useful information can often be obtained where an enema only is given, by sending the patient to the toilet; then making films and fluoroscopic observation after the evacuation of the enema. The colon frequently shrinks down and gives a very markedly different appearance. Also it is important to differentiate between functional disturbances and changes and some of the lesions that cause mechanical interference with the enervation. These latter may be difficult to demonstrate. However, careful study with both meal and enema will usually show some evidence of them.

❋

Carl B. Bowen, M. D. (1624 Franklin Street, Oakland).—Doctor Ruggles is to be congratulated on presenting a paper calling attention to some of the diagnostic factors in one of the most difficult and uncertain roentgen-ray examinations.

I would like to stress the importance of a complete and careful examination, making both fluoroscopic and film examinations following an opaque enema, again following evacuation of the enema, and last but not least, following insufflation of the colon, particularly in the indefinite case. It is only by such means that one can feel at all secure in his interpretation.

I would like to ask Doctor Ruggles if the commonly seen spastic colon, the small contracted colon which takes only a very small enema and shows no ulcerative change, and the smoothed-out colon seen in mucous colitis, are all the result of different degrees of the same nervous stimulation, or is each the result, at least in part, of an entirely different type of nervous stimulation? Has he ever seen a typical mucous colitis colon that either allergy or infection alone could be proved as the cause? Has he ever seen a mucous colitis colon return to a normal roentgenologic appearance following treatment? Has he seen any change in the appearance of the colon of the nervous patient following the administration of sedatives as, for example, one of the barbital group?

❋

Charles M. Richards, M. D. (303 Medico-Dental Building, San Jose).—In this paper Doctor Ruggles has given expression to observations that I am sure all radiologists have made repeatedly in the course of their examinations of colons incident to the routine roentgen gastro-intestinal examinations. Quite frequently the conclusions on those observations were the noncommittal "gastro-intestinal tract negative" based on the fact that no intrinsic pathology was found in the stomach or intestines. The conclusions were often erroneous, however, for we have failed repeatedly to suggest to the referring physician the significance of certain manifestations in the colon, particularly, which were obviously of a functional nature, and hence given scant consideration, when they might have been indicated as sign-posts pointing to a very definite pathologic process elsewhere or to a psychic or sympathetic imbalance which was causing the patient just as much suffering as though an actual pathologic process were present.

Doctor Ruggles has given us very concisely the anatomic and physiologic bases of the ability of the colon to express so many things. I am sure, did we but read the colons of our patients more exactly, they would reveal to us many leading truths that have heretofore passed unnoticed or disregarded.

I cannot help but feel that the emphasis thus placed on this subject is just one more argument for the consulting radiologist's insisting on a full clinical knowledge of the case under investigation, in order that the interpretations of his findings may be more human and hence more valuable.

❋

Doctor Ruggles (Closing).—In answer to Doctor Bowen, I believe the markedly spastic colon represents in general a vagus preponderance, and the smoothed-out colon, usually atonic, a sympathetic hyperactivity. It is probable that all mucous colitis is a nervous manifestation, and we have seen many cases of this type become normal with a stabilization of the nervous system. In our experience, barbital does not make so much difference in the appearance of the colon as it does in its function.

SOUTH AMERICAN TRYPANOSOMIASIS OF THE HUMAN TYPE—OCCURRENCE IN MAMMALS IN THE UNITED STATES*

By Charles A. Kofoid, Ph. D., Sc. D., and Fae Donat, A. M.

IN 1916 Kofoid and McCulloch[1] described a trypanosome from the digestive tract of *Triatoma protracta*, the cone-nose bug, often called the kissing bug, and locally known as the China bedbug, or crossbug, because the folded wings are cruciform (see Fig. 1). These bugs live in considerable numbers in the large brush-pile nests of the wood rats (*Neotoma*), and occasionally in the subterranean nests of the meadow mice (*Microtus*), two genera of rodents widely distributed in the western United States. These bugs fly at night and are attracted to lights in houses and in camps in the open. They are blood-sucking insects which feed in the laboratory at intervals of one to three weeks, engorging the digestive tract with blood, and defecating at the site of the bite.

CONE-NOSE BUGS—HABITATS IN CALIFORNIA

These bugs in nature, collected at several localities from some but not all nests examined in San Diego County, are very heavily and very generally infected with the flagellate which was described as *Trypanosoma triatomæ*. The infection occurs in a variety of typical developmental stages, including the trypanosomal, crithidial, trypani-

* From the Zoölogical Laboratory, University of California.

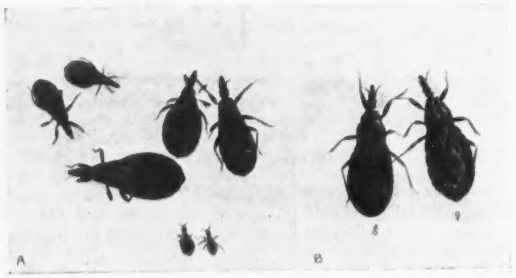

Fig. 1.—*Ariatoma protracta,* Hemipteran host of *Trypanosoma cruzi* in California: *A,* nymphs of various sizes, some engorged with blood; *B,* adult male and female (natural size).

form, and spore-like phases. This indicates that the bug is a normal host, and analogy suggests that it is the insect vector of a blood-dwelling trypanosome in some vertebrate, presumably mammalian, host. The conditions of life of the bug naturally lead to the inference that this host is the wood rat, or meadow mouse, or both.

Investigations of the blood of the wood rats in nature, carried on at Berkeley in 1916 and since, have not fulfilled these expectations by bringing to light *Trypanosoma triatomæ* in their blood. On the other hand, it was found that wood rats about Berkeley do harbor generally a trypanosome in their blood. This trypanosome, on careful study, has been proved to be *T. lewisi,* the widely distributed trypanosome of the common house rat. Wood-rat nests are infested with *Ceratophyllus fasciatus,* the well known insect vector of this trypanosome of the rat.

Triatoma protracta is known to occur throughout California, as far east as Utah, and southward into Mexico. The limits of the distribution of its trypanosome infection are unknown as yet, except for its very general prevalence in bugs from certain nests of wood rats in San Diego County, and its absence in bugs from other nests and from all bugs thus far examined from the neighborhood of Berkeley. Hereditary transmission through the egg has not been found in bugs isolated from infected parents and raised in the laboratory, nor, as yet, have trypanosomes been found in young bugs reared with infected adults. We have as yet been unable to demonstrate any method whereby the trypanosome infection can be passed naturally from bug to bug, though presumably anal feeding or cannibalism might accomplish this. The intervention of a mammalian host seems on *a priori* grounds to be essential for the maintenance of the infection.

Trypanosome infections, with *Trypanosoma triatomæ* = *T. cruzi* in young uninfected nymphs of *Triatoma protracta,* have been established by feeding them upon experimentally infected albino rats whose blood at the time contained active trypanosomes (see Fig. 2).

TRYPANOSOMES—INSECT VECTORS

The method of transfer of the trypanosomes from this insect vector to the mammalian host in nature is not as yet certainly known, and the very existence of such infections in nature in mammals of California is also as yet undetected. Possibly this failure to find them results from early infection of the young mammal and the passing of the infection into a carrier stage, with the subsequent decline of the infection to a very low level.

Experimentally we have infected an albino (Wistar) rat fifteen days old by an intraperitoneal injection in Locke's solution of the entire contents of the gut of an infected *Triatoma protracta* collected from the nest of a wood rat in San Diego County. Blood in Locke's solution from the tail of this rat, containing active trypanosomes injected intraperitoneally into a young (14 days) Wistar rat resulted in a transfer of the infection, as also citrated blood similarly injected into another young (21 days) Wistar rat. A similar injection of citrated infected blood into a half-grown Virginia opossum resulted in infection. Finally, a wood rat, a young-of-the-year, 117 days old, born in the laboratory from a mother collected near Berkeley, belonging to the subspecies *Neotoma fuscipes annectens,* was also infected by an intraperitoneal injection of citrated infected blood. Undiluted heart blood from an infected Wistar rat injected into a young Wistar rat produced an infection. The trypanosomes appear in fresh smears of tail blood in cases of successful inoculation on the sixteenth to the twenty-fourth day after inoculation, are never abundant, and disappear and recur in the peripheral blood.

Splenectomy of rats injected intraperitoneally with infected blood and examined every other day for trypanosomes in the peripheral blood, with negative results, has in several cases resulted in the appearance of *Trypanosoma cruzi* in the blood smears on the second or third day after the operation (see Galliard[2]).

The heart muscle (Figs. 3 and 4) is filled with nests of minute Leishman-Donovan-like bodies, among which both crithidia- and trypanosome-like stages can be found. The picture of infection in the heart muscle of the mammalian host is identical with that figured by Chagas[3] in the mammalian hosts in the cases of Brazilian human trypanosomiasis.

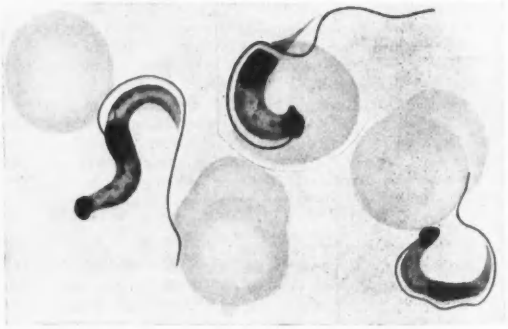

Fig. 2.—*Trypanosoma cruzi* with red blood corpuscles from an experimentally infected albino rat. X 3924.

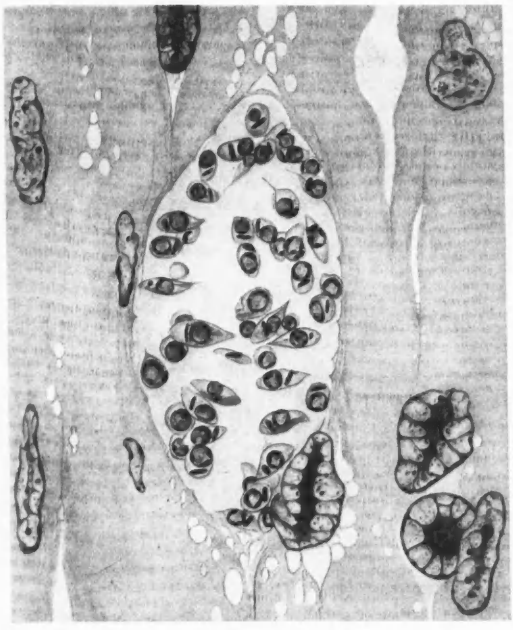

Fig. 3.—Developmental stages of *Trypanosoma cruzi* in heart muscle of albino rat. X 2000.

SUMMARY OF PRESENT KNOWLEDGE

The facts thus far discovered concerning this trypanosome and its host may be summarized as follows:

1. The kissing bug, or cone-nose bug (*Triatoma protracta*) has been found to be (1916, 1932) infected with a trypanosome in San Diego County. This trypanosome is identical with *Trypanosoma cruzi*, the cause of human trypanosomiasis in Brazil.

2. Infected bugs have been taken in nests of wood rats (*Neotoma fuscipes macrotis*) in San Diego County. Bugs from wood-rat nests (*Neotoma fuscipes annectens*) about Berkeley have not been found to be infected with trypanosomes, but can be infected by feeding them on infected albino rats.

3. Laboratory rats have been infected by intraperitoneal injection of the contents of the digestive tract of an infected bug and by the eating of six infected bugs, but not by the bites of infected bugs.

4. The trypanosome from California is identical with *Trypanosoma cruzi* of human Brazilian trypanosomiasis in morphology, in both the insect vector and the mammalian host, and in its attack on cardiac muscles. Its insect vector belongs to the same genus (*Triatoma*) of hemipteran bug in the two localities.

POSSIBILITIES OF HUMAN INFECTION

These facts suggest the possibility of human infection of *Trypanosoma cruzi* in western United States, as well as in Brazil. Facts favoring this suggestion are the widespread occurrence of the insect vector and of the probable mammalian reservoir, the wood rat. The insect vector, *Triatoma*, is known to bite man. The factors militating against human infection are (1) the limitation of the wood rat to wooded canyons and hillsides and, in general, to the uninhabited chaparral belt, and (2) the fact that not all bugs and not all wood rats are infected. Our experiments indicate that both bugs and rats from localities where infection has not been found can easily be infected experimentally. They are, therefore, potential factors in the problem of human infection.

The geographical extent of the problem of a potential human menace is involved in the distribution of wood rats and the degree to which six subspecies of *Neotoma fuscipes* are potential reservoir hosts. An additional factor is the spread of the recently introduced Virginia opossum (*Didelphis virginiana*) on the Pacific Coast. This mammal is wont to hide in the nests of wood rats. We have experimentally infected it with *Trypanosoma cruzi*, and Robertson [4] found the trypanosome in an opossum at Tela, Honduras. It is therefore possible that this introduced opossum may also serve as a reservoir host.

The species of wood rat incriminated as a probable reservoir host is *Neotoma fuscipes*. Mammalogists distinguish six geographically isolated subspecies of this species. These are: (1) *Neotoma fuscipes fuscipes*, distributed from San Francisco Bay northward into British Columbia in the Coast Ranges; (2) *Neotoma fuscipes annectens*, which ranges from San Francisco Bay southeastwardly in the mountains to Monterey Bay and then only to the east of Salinas Valley; (3) *Neotoma fuscipes macrotis*, which ranges from Monterey Bay southeastwardly in the Coast Ranges into Lower California, but only on the west side of Salinas Valley; (4) *Neotoma fuscipes simplex*, which ranges in an arc around the southern end of the San Joaquin Valley; (5) *Neotoma fuscipes streatori*, which ranges along the western slopes of the Sierras along the central valley of Cali-

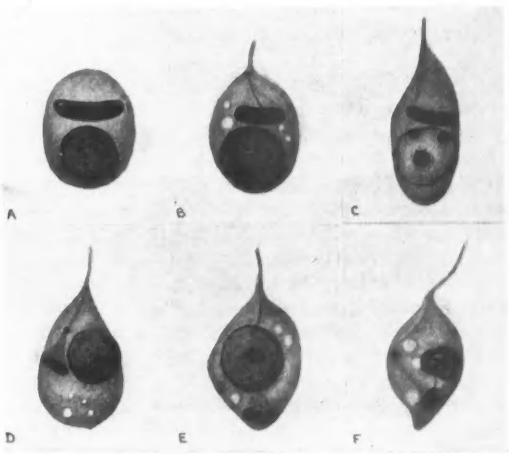

Fig. 4.—*Trypanosoma cruzi* from heart muscle of albino rat: *A*, leishmaniform stage; *B* and *C*, crithidial stages; *D*, transitional stage between crithidia and trypanosome; *E* and *F*, trypaniform stages. X 3924.

Fig. 5.—Distribution of the subspecies of the wood rat, *Neotoma fuscipes*, in California.

fornia; and (6) *Neotoma fuscipes mohavensis*, which occupies a limited territory in the Mohave Desert (see map, Fig. 5).

Of these six subspecies one only, *Neotoma fuscipes macrotis*, lives in territory where infected bugs have thus far been found. However, another subspecies, *Neotoma fuscipes annectens*, can experimentally become a reservoir host. This opens up the possibility that the other subspecies are also potential reservoirs.

The mode of infection is important in estimating the relation of this animal-borne disease to human infection. Chagas [3,5] believed it to be transmitted by the bite of the insect vector and reports the occurrence of the flagellates in the insect vector in the anterior position, *i. e.*, in salivary glands. Brumpt [6] is of the opinion that this anterior position is rare and accidental and that the normal position is posterior. The findings of Kofoid and McCulloch [1] in *Triatoma protracta*, the insect vector in California, support Brumpt's view. All of our controlled experimental efforts to inoculate laboratory mammals by simple biting have failed.

The posterior position (rectal and feces) in the insect vector, by inference, implies normal infection by contamination rather than by the injection of the infection in the act of biting. Our infection of a white rat which ate an infected bug supports the contaminative method. In nature and under laboratory observation the bug defecates near the site of the bite as its digestive tract fills with blood. Mammals, when thus bitten, usually bite and lick this region, and in so doing may introduce the infective stages of the trypanosome intradermally into the lesion or bring them into contact with the mucous membranes of the mouth and thence possibly with the epithelium of the digestive tract. Trypanosomes are known to penetrate cells and tissues of mammals. In the case of Chagas' [3] observations, there is no evidence that he excluded intentionally the possibility of contamination of the wound by the extruded feces of the bug. The irritation of the bite of the bug might easily lead to the rubbing of the site in man and cause the introduction of the infective stage of the trypanosome into the lesion.

SYMPTOMS

For many years these cone-nose bugs have been sent in to Professor W. B. Herms and to us by persons bitten by the bugs, or by physicians in attendance. The symptoms attendant on the bite have been attributed to the poisonous nature of the secretions discharged in the lesion, presumably from the salivary glands. To what extent, if any, the sequelae result also from the trypanosome infection introduced, questionably by the bite, more probably by contamination of the wound by rubbing into it the feces of the bug deposited near it, is as yet wholly unknown.

The Brazilian human trypanosomiasis, whose insect vector is *Triatoma megista*, occurs in an acute form mainly in very young children. The infection becomes chronic in older children up to fifteen years, and also occurs in adults. It is associated in children with retardation of development of mind and body, and with indications of involvement of heart, meninges, or brain. The trypanosome occurs sparingly in the blood and also in the cerebrospinal fluid, and can be found at autopsy in the heart muscle.

The period of incubation is from ten to thirty days. In the acute form which follows, there is fever, edema, anemia, and enlargement of the liver, spleen, and lymphatic glands. The thyroid and ovaries showed fibrosis and sclerosis, but this condition in these organs may not be due to trypanosomes.

OBJECT OF THIS PRELIMINARY PAPER

This preliminary paper is published in order that physicians attending patients bitten by "kissing bugs" may be aware of the possibility of trypanosome infection and may seek to differentiate between toxic results of the bite and an infection by trypanosomes. The writers will be pleased to examine blood smears, preferably taken over a series of days, including the tenth to the twentieth, and to examine bugs for trypanosome infections. The living bug should be sent to us if possible. Directions for the intraperitoneal infection of rats with the patient's blood will also be sent on request.

University of California.

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OBSTETRICAL ANESTHESIA—ITS PRESENT STATUS*

By JOHN ROBERT BURROWS, M. D.
San Francisco

DISCUSSION *by William W. Hutchinson, M. D., Los Angeles; Dorothy A. Wood, M. D., San Francisco; H. A. Thompson, M. D., San Diego.*

THE alleviation of pain attendant upon childbirth is today a method so generally accepted and practiced that it is perhaps difficult for us now to appreciate to the full extent the efforts of the distinguished pioneers in this field, especially Simpson, in Europe, and Channing, in this country. The various means of achieving this end present an ever-widening study, and it has seemed that a review of the various methods would not be unprofitable. This paper has been written not in the hope of presenting something new, but rather in the hope of learning from our fellow workers their experiences in this field, and so adding to our practical knowledge of the subject. Pain in labor may be natural, but it is very questionable whether it is harmless. Pain under any other condition is considered symptomatic of disease. The modern woman, reared under our present culture and civilization, cannot stand such pain without some injury. Various methods to accomplish the alleviation of pain in labor have been introduced and have met with a fair degree of success, but it would seem we have not yet found the ideal method.

ALLEVIATION OF PAIN

There are certain minimum requirements which must be demanded of any procedure to eliminate pain in labor; it must be safe for mother and child; it must be efficient in abolishing pain; and if it is to have widespread use it should not be complicated. The busy obstetrician or anesthetist is not able to devote his entire time to each patient, and therefore some of the supervision must be left to subordinates. Each patient must be considered individually; one method alone will not answer for every case, but a combination of methods may give better results. Another requirement which many obstetricians insist upon is that the patient be able actively and voluntarily to coöperate during the second stage. A fact also to be remembered is that any drug or agent that is given the mother will to some extent be passed over to the child. The investigations of Jung [1] have shown this very conclusively.

DRUGS AND AGENTS USED

Among the drugs and agents used to alleviate the pain in labor are: chloroform, ether, nitrous oxid, ethylene, morphin, scopolamin, magnesium sulphate, the barbiturates, avertin, novocain by local infiltration, sacral or spinal anesthesia.

Rucker [2] states that all anesthetics and analgesics have a greater or less tendency to quiet uterine contractions. The analgesics, in this regard, he ranks in the following order: paraldehyd, magnesium sulphate, morphin, bromid and chloral. The general anesthetics he places in the following order: chloroform, ether, nitrous oxid and ethylene. He also claims that scopolamin usually increases the force of uterine contractions; and that novocain, in sacral anesthesia, has an inhibitory or a stimulating effect, according to whether adrenalin is used with it or not.

The use of chloroform and ether is still widespread, though chloroform is not used nearly to the same extent as formerly; and, considering the reports of injurious after-effects on the child, it is difficult to understand why it is used at all. It is doubtful whether, in the proper administration of either, the mother received sufficient to cause harm to herself; but, though probably not as efficient as chloroform in relieving pain, ether undoubtedly is the safer of the two, both to mother and child. However, it is comparatively slow in its action, and in obtaining its analgesic action the coöperation of the mother is apt to be lost.

GWATHMEY METHOD

In 1923, Gwathmey [3] introduced ether-oil-quinin colonic instillation combined with morphin and magnesium sulphate to produce analgesia in labor, and its use is at the present time widespread. Basing conclusions on a review of twenty thousand cases, he and Davis [4] find that all drugs used at the time given and in the prescribed dosage are safe to both mother and child; that while analgesia is the fundamental factor in this method, amnesia is also frequently present; that 90 per cent of patients obtain some relief, the greater percentage a great deal; that it may be used as easily in the home as in the hospital; that it is inexpensive and does not require an especially trained person to administer it; and that the obstetrician does not have to be present continually throughout labor. It does not prolong labor, even in cases of bad position or presentation. Vomiting is not more frequent than without analgesia; the perineal muscles are well relaxed; patients are quieter and undergo less strain and consequently are in better condition next day. A small percentage of patients show marked excitement, but not to the extent of requiring forcible restraint. The only contraindications are colitis, diabetes, and auditory disturbances. It is not contraindicated in cardiac cases, toxemias, or placenta praevia that have been permitted to go into labor; asphyxia, postpartum hemorrhage, and stillbirths are not more frequent than if this method had not been used.

* Read before the Anesthesiology Section of the California Medical Association at the sixty-first annual session, Pasadena, May 2–5, 1932.

Pettit [5] considers the Gwathmey method very valuable and uses it in practically all cases except very rapid labors, using N_2O-O at the terminal stage. He reports no untoward effects either in mother or child.

Emge,[6] in summarizing his observations on a series of two hundred cases, concludes that it is a distinct advance in relieving the suffering of labor. Its applicability in his hands was practically limited to primiparae and those labors which were long and difficult. The serious drawback that he found was the increased fetal anesthesia, which was frequent and at times serious.

Stephenson [7] considers the method valuable in primiparae in slow labors in tiding them over to the second stage, where the effect of chloral or morphin, given in the first stage, has not been sufficient to carry them that far.

The resident in obstetrics at Stanford Hospital tells the writer that, on the clinic side, the method has been used extensively, particularly in primiparae, using N_2O-O at the terminal stage with very satisfactory results.

Many obstetricians do not agree that the method is as simple as is claimed, and object to the delayed labors, lack of coöperation on the part of the patient, increased forceps deliveries, the rectal irritations, and the fetal anesthesia.

MORPHIN

The chief danger in the use of morphin lies in its depression of the child's respiration and it should not be administered within three or four hours of expected delivery. De Lee [8] considers morphin indispensable in obstetrics, being superior to chloral and the barbiturates; not to be used routinely, however, but as indicated, particularly in carrying primiparae throughout a prolonged first stage, thereby giving rest to the mother while not endangering the child.

MAGNESIUM SULPHATE

Magnesium sulphate has long been known as a sedative and analgesic. Gwathmey [3] has maintained that morphin and magnesium sulphate are synergistic. Beckman [9] states that there is no such action between the two. At any rate, the dose usually employed two cubic centimeters of a 50 per cent solution, is harmless, but the morphin used with it may endanger the child.

TWILIGHT SLEEP

"Twilight sleep," first used by Steinbrickel in 1902, employed as active agents morphin and scopolamin. Its original popularity has largely disappeared, due to failure in obtaining analgesia in many cases, to unmanageable patients, prolonged labors, and to narcotized babies. Constant supervision by the physician was necessary, and the coöperation of the patient could not be expected.

SCOPOLAMIN

According to Sollman,[10] scopolamin in therapeutic doses causes practically no change in respiration or blood pressure, while toxic doses depress respiration, heart, and blood pressure. The combination with morphin increases not only the narcotic action but also the depression of respiration, and this in an irregular degree. According to experiments done at the Washington University Medical School,[11] scopolamin, alone, "in doses larger than recommended in 'twilight sleep' has no material effect on blood pressure or respiration." Scopolamin during the first stage, and in one or two small doses, is used by some obstetricians, supplementing this by some inhalation anesthetic during the second and third stage. Van Hoosen,[12] in reviewing some two thousand cases, shows excellent results with scopolamin as the anesthetic, but considers the use of morphin with it a decided disadvantage and a real danger. She states the disadvantages are that it requires thirty to forty minutes for the scopolamin to become effective and that the patient may become restless and require restraint and is not amenable to suggestion. The advantages are the shortening of labor, less postpartum bleeding, increased uterine activity, with the patient oblivious to her surroundings, and may be safely prolonged for any delivery.

Beckman [9] has stated that magnesium sulphate and scopolamin are synergistic. Fist [13] has obtained very satisfactory analgesia with this combination, with an inhalation anesthesia for the perineal stage, if necessary. He reports elimination of pain, a patient tractable and able to coöperate, and no decrease in the force of uterine contractions or ill effects on the child. Magnesium sulphate would seem to eliminate the restlessness sometimes seen from scopolamin alone.

Krebs [11] uses scopolamin and morphin seminarcosis in the first stage, especially in primiparae, or in any prolonged labor. He reports some restlessness and excitement, but no increase in the infant mortality, but rather a decrease. An inhalation anesthetic was used in the terminal stage.

AVERTIN

Avertin, or tribromethanol, has been used more extensively abroad, in obstetrics, than in this country, though its use here would seem to be increasing. It is recommended [14] that the dose be 60 milligrams per kilo of body weight, in a two and one-half per cent solution, preceded by a hypodermic injection of morphin, one-sixth to one-quarter grain one-half to one hour previous to the instillation. The instillation of the avertin is given when the head is below the pelvic brim and the cervix fully dilated, the effect being established in about fifteen minutes and lasting for from one to two hours. A second and smaller dose, 20 to 30 milligrams per kilo, can be given if delivery has not been accomplished before the effect of the first has worn off. Uterine contractions may be less frequent and slightly diminished in force. Small amounts of a supplemental anesthetic are usually required for the third stage and for repair.

Reed [15] found that changes in pulse, blood pressure, and respiration did not differ materially from those ordinarily due to uterine activity alone. He concludes that avertin relieves the pains of labor without interfering with uterine contractions and is safe to both mother and child.

Wall [16] noted that the amnesic effect lasted much longer than the analgesic.

Pierce [17] found that, while the majority of labors were painless, there were some patients who became markedly excited and even uncontrollable.

Avertin is contraindicated in disease of the liver, colon, and kidney, and in thyroid deficiency.

NOVOCAIN

The local use of novocain for infiltration of the cervix or of the perineal body and levators has been employed by some.[18] Many obstetricians feel the method to be uncertain and a probable source of infection.

Sacral anesthesia has also been used to a certain extent. Rucker [19] and Oldham [20] report successful anesthesia in 85 per cent of selected cases. It gives excellent relaxation, the patient is able to cooperate, and it is a fairly safe procedure. The blood pressure should be watched closely. Novocain, used without adrenalin, causes no change in uterine contractions. Spinal anesthesia has been used to some extent in labor. The same dangers and contraindications are present here as in surgery. Cosgrove [21] has used it with success in selected cases. Ephedrin is given before to counteract the fall in blood pressure, and pituitrin after to stimulate contractions, as labor is practically arrested by the spinal injection. There is complete anesthesia, with good relaxation and coöperation of the mother.

In neither sacral nor spinal anesthesia was there any deleterious effect upon the child. Neither is applicable to the first stage.

BARBITURATES

Recently the barbiturates, particularly sodium amytal, have been employed as an analgesic, usually with some other agent, in obstetrics. The action of the barbitals is hypnotic, sedative and antispasmodic. They are mildly analgesic and only in large and toxic doses are they anesthetic. The pharmacologic basis for their use is a prompt and lasting central depression, the lasting effects due to their slow elimination. The barbitals would seem to eliminate the appreciation of impulses from the external world and also tend to cut off the central inhibitory impulses, which may account for the excitation seen at times following their administration. Barbital in therapeutic doses does not materially affect circulation or respiration. Hanzlik [22] states that the degree of alkalinity to dissolve the barbituric acids is greater than that possible in the blood or tissues and that after intravenous injection they are precipitated, or exist in some colloidal state in the body, and that therefore such use is dangerous. He states that the efficiency of the various barbituric derivatives varies directly with their toxicity and that the margin of safety in therapeutic doses has not been amplified by the increase of the activity of the derivatives.

The Council on Pharmacy of the American Medical Association [23] does not consider there is any advantage in their intravenous use over the oral, and considers it unjustifiable to so use them. It gives the disadvantages of such use in obstetrics as danger of asphyxiation of the child, restlessness of the mother, prolonged anesthetic state with absence of protective reflexes, lack of the patient's coöperation, and danger of pulmonary congestion and edema.

De Lee [8] has expressed himself as dissatisfied as to the effect of sodium amytal and reports several narcotized babies. Stephenson [7] had unsatisfactory results with its use, particularly excitability in the mother and apnea in the child.

Hamblen and Hamblin [24] used sodium amytal as the sole anesthetic agent by oral administration and concluded that the depth of narcosis depended rather on the dose than on the method of administration; that labor was not prolonged nor instrumental interference increased; there was no increase in postpartum bleeding or ill effects on the child. Amnesia and moderate analgesia were obtained in the vast majority of cases, but anesthesia could not be relied upon. Marked variations of susceptibility occur and there may be definite idiosyncrasies. Restlessness was the greatest drawback. There was no coöperation on the part of the patient.

Massey [25] used sodium amytal intravenously and his conclusions are much the same as Hamblen's. He warns that blood pressure and respiration must be watched closely, and insists on a careful and cautious use of the drug and that the patient must be watched at all times.

Swendson,[26] with this method, obtained amnesia in 90 per cent of cases, but found restlessness to be the objectionable feature of the procedure, and that a third of the babies were apneic, requiring stimulation.

Cohen,[27] and also Bristol,[27] recommended a moderate dose of sodium amytal by mouth, with a 1/200 grain of scopolamin early in labor, repeating this if necessary, and conducting the second stage with N_2O-O. They state it can be given earlier than morphin and gives amnesia in the majority of cases. Labor is not slowed and there are no ill effects on the child and the mother sleeps several hours after delivery.

Pernocton, a brombarbiturate for intravenous use, has been used by Brown, Maloy, and Laird.[28] Relief of pain and amnesia were obtained in nearly all of the cases. There were occasional varying degrees of excitement. Eight per cent of the babies required stimulation to start respiration.

Rudolph Kobes [29] agrees that pernocton is useful as an analgesic in labor, but reports many deeply narcotized babies.

Axelrod [30] has combined the barbiturates, nembutal, and neonal with the ether-oil-quinin rectal instillation and reports uniformly good results. Restlessness may develop, but amnesia was always present and there were no ill effects to mother or child.

NITROUS OXID, OXYGEN, AND ETHYLENE

The use of nitrous oxid and oxygen came into more or less general use in obtaining analgesia and anesthesia in labor in 1914 or 1915, Webster, Lynch, and Davis calling particular attention to this method. They pointed out that a few breaths

of this mixture given at the beginning of a contraction gave the same type of analgesia as chloroform, that it stimulated rather than diminished the force of the contraction and, in correct proportion, there was no injurious effect on either mother or child. At that time it was thought that it could be administered indefinitely, but later it was considered better not to administer it over three hours, though the writer has never noted any ill effects when that length of time was exceeded. Nitrous oxid is absorbed rapidly into the blood, forming a very loose combination with it, and is as rapidly eliminated. It would seem to have no deleterious effects on any of the body tissues. Nitrous oxid causes death only by asphyxia, which is impossible with the mixture containing sufficient oxygen, as it must in obstetrical work. Its use does not delay labor, and often would seem to hasten it by stimulating the contractions and by allowing the mother to use her voluntary muscles in the expulsion of the child without pain.

Practically all that has been said about nitrous oxid will also apply to ethylene, except that higher percentages of oxygen can and should be used with it, and that it gives more relaxation. Ethylene has a disagreeable odor and is highly explosive; on that account its use has been given up by some obstetricians and hospitals.

Since 1917, N_2O-O analgesia has been used at Stanford Hospital for the alleviation of pain in labor, and it is this method that the writer is particularly familiar with. The administration is started late in the first or at the beginning of the second stage, depending on the rapidity of labor. Whatever medication is given during the first stage will depend upon the obstetrician's personal feeling and upon the progress of labor and the discomfort of the patient. Many multiparae, and some primiparae, require nothing up to the time of administering the gas. Chloral and bromid, morphin, or, less frequently, ether-oil rectal instillation (the last being used more frequently on the clinic side than on the private) may be used. The writer thinks there has been no use of scopolamin or the barbiturates. Those patients having "Gwathmey" are apt to be uncoöperative during the administration of N_2O in the second stage. The mixture used will depend on the reaction and needs of the patient. A large percentage seem to do very well with 15 or 20 per cent oxygen from the start. In case of almost continuous and severe pains analgesia may be continuous. At the third stage, or in case of instrumental delivery, the analgesia is deepened to anesthesia. At this point it may be necessary to supplement the N_2O with ether. The amount is usually small, and we have never been able to see any deleterious effects to either mother or child. We have insisted on the avoidance of any cyanosis in the mother, preferring to add ether than to crowd the gas. Coöperation of the patient is very necessary to the success of N_2O analgesia, and it is important that in the intermittent administration the patient does not become anesthetized. This can be avoided by adding oxygen though, for a patient to drift off to sleep between pains is rather beneficial than harmful. The majority of patients coöperate well, and failure to do so is usually due to inability to understand the directions, unpleasant effects from N_2O-O, and in some cases to the innate perversity of the human race. During the administration the patient should be encouraged and commended for her efforts and reassured as to the progress. We have felt that labor has been but rarely delayed, if at all; often that it has been hastened. Postpartum hemorrhage has not been increased. We have not seen that stillbirths are more frequent with this method than without, nor have we been able to attribute any of these to the effect of N_2O-O. As a precautionary measure against asphyxia, we have administered 100 per cent oxygen to the mother as the shoulders were being delivered, and feel that this has been very beneficial. We have not felt that asphyxia has been due to N_2O, combined with the amount of oxygen that we use, but rather to prolonged labor, undue pressure on the child, difficult deliveries, and the various accidents that may happen during labor. We have obtained satisfactory analgesia in more than 95 per cent of cases. After a survey of some three thousand cases, we feel that this method is very efficient in abolishing pain and in allowing the mother to coöperate actively and that it is very safe to both mother and child.

RESUSCITATION

As the anesthetist, as one of an obstetrical unit, is being called upon more and more to aid in the resuscitation of the new-born, a few words on this subject may not be amiss. The degree of asphyxia in the new-born may vary from a slight depression of respiration and circulation to the extreme degree where there is no respiration, very depressed circulation with absence of reflexes and muscle tone. Active and rhythmic respiration in the newborn is not established unless the respiratory apparatus and the respiratory center present anatomic integrity. Both the respiratory apparatus and the respiratory center must be considered in asphyxia neonatorum. The causes producing asphyxia may be a long labor, with hard contractions, atelectasis, the effect of drugs, long-continued pressure on the head, intracranial injuries, or premature separation of the placenta. Drugs as stimulants to respiration in the new-born would seem to be without value.[31] As shown, particularly by Henderson,[32] CO_2 is the physiologic stimulant of the respiratory center. Waters [33] has shown that there is a tendency to fetal anoxemia during labor and that the respiratory center of the fetus tends to be depressed, and a CO_2 tension above normal is desirable. The anoxemia can be avoided by the mother's breathing an oxygen-rich atmosphere, and the CO_2 content can be kept up by intermittent rebreathing until the mouth is delivered.

Coryllos [34] has shown that the lung of the newborn is in a state of collapse and, with the first breath, does not expand entirely and may not reach its full expansion for some days. Persistent atelectasis, complete or partial, is due to bronchial obstruction, and if not relieved results in immediate or delayed asphyxia and predisposes to pulmonary infections.

Whatever the cause of this condition, the first thing to be done is to insure that the respiratory apparatus is free from obstruction. The mouth, pharynx, and trachea must be cleared of fluid by gentle wiping, suction, or by gravity. Flagg[35] recommends the use of the laryngoscope and suction, even using suction in the trachea, if necessary. The actual condition of the child, indicated by the heart action, muscle tone and reflexes, is the guide to the treatment required. The vigorous manual methods have lost much of their former popularity, and undoubtedly have often caused injury and defeated their own purpose. The mildly depressed baby that responds readily to stimulation responds readily to a few cold breaths against the body, gentle rubbing, or a sharp spank. The deeper-asphyxiated child, breathing occasionally on external stimulation but with the reflex tone of the glottis active, responds readily to O-CO_2. The child with loss of reflex and muscle tone and poor heart action requires immediate clearing of the mouth, pharynx, and trachea by whatever method, and insufflation of CO_2, 5 to 7 per cent, with oxygen, as recommended by Henderson, by bag and face mask or directly into the trachea by the laryngoscope under pressure of 15 to 20 millimeters, as recommended by Flagg, and continued until there is no evidence of heart action. Also the child should at all times be kept warm. Any apparatus for insufflating the lungs should be provided with escape valve that will blow off at 15 to 20 millimeters pressure. Any overpressure may cause rupture of the alveoli, which is one disadvantage of the mouth-to-mouth method, which, though empiric, is useful if done gently. In persistent absence of respiration, as in cerebral hemorrhage or when due to drugs, the Drinker respirator may prove of value. It does not, however, take into consideration the necessity of getting CO_2 to the baby. Murphy,[36] in a study of a series of cases, considers it the most valuable means of resuscitation. Others have totally disagreed with this view, considering it ineffectual or even harmful, especially when the baby is trying to breathe and will not synchronize its breathing with the machine.

Asphyxia neonatorum is a condition that must always be anticipated. The condition must be treated as indications require. The simpler the method, provided it is effective, the better. Everyone will possibly differ as to the means of artificial respiration, but whatever method is used, gentleness is essential and avoidance of injury to the body or organs of the child. If the writer may quote Henderson:[32] "Resuscitation of the newborn child should be based on the modern conception of the regulation of respiration by the action of the blood gases on the respiratory center. Oxygen is not a stimulant, but a food. Deficiency of oxygen, beyond a first slight stimulating effect, depresses the nerve centers. In the absence of oxygen, the tissues of the body cannot produce CO_2. It is the CO_2 carried by the blood from the tissues to the brain that is the physiologic stimulant to respiration. When the respiratory center is depressed, it requires more than the normal amount of this stimulant to induce activity."

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DISCUSSION

WILLIAM W. HUTCHINSON, M. D. (1930 Wilshire Boulevard, Los Angeles).—The author has given us a brief outline of the various methods used in present-day obstetrical analgesia. There are two, and only two, considerations in obstetrical analgesia and anesthesia: (1) alleviation of the mother's pain with the least possible danger; and (2) safety of the child.

To safeguard these two factors to the greatest degree the agent or agents used must have flexibility, and be subject to immediate and complete control by the obstetrician or anesthetist at all times. Any drug given intravenously, by hypodermic injection, rectally, or even orally, is beyond the control of the one who administers it and, while drugs given by these methods may at times be indicated and often give spectacular results, I do not feel that they are protecting mother and child to the greatest possible degree and that they are without danger.

Many of the agents which have been advanced in the past few years, each being claimed by its adherents as the acme of perfection, are to a great degree hypnotic drugs and have only very slight analgesic and, in safe dosage, even less pronounced anesthetic properties. These drugs to a great extent obliterate cerebral control and the obstetrician, under these circumstances, loses one of his greatest assets—the coöperation of the mother. While she may be amnesic, the painful stimuli are transmitted and instead of producing coördinated effort, energy is often wasted on ineffectual muscular exertion which is detrimental to both mother and child.

I, personally, am inclined to agree with Doctor Burrows, and feel that nitrous oxid-oxygen analgesia is probably the safest and most flexible obstetrical analgesia we have at the present time. It can be controlled at all times, can be carried down during contractions and discontinued between pains with rapid elimination or deepened to complete anesthesia, with possibly the addition of a small amount of ether for the actual delivery, and by giving an excess of oxygen as the head and shoulders are delivered, resuscitation of the new-born is rarely required.

The ideal in analgesia and anesthesia, obstetrical or surgical, has not been produced and it is my hope that investigators will continue to search for better agents than we at present possess, but I am of the opinion that we sometimes err in being too prone to accept the new before it is proved beyond a reasonable doubt to be superior to the older and established methods.

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DOROTHY A. WOOD, M. D. (1390 Seventh Avenue, San Francisco).—Doctor Burrows has given an excellent résumé of the various methods in use for the relief of obstetrical pain. I agree with him in feeling that nitrous oxid-oxygen analgesia and anesthesia are the safest for mother and child and give the best results of any known agent in the later and more painful stages. At the time of delivery or during repair, if relaxation is not all that is desired, a small amount of ether may be added. During the early stages of prolonged labor, I have seen a few patients very well controlled with a small oral dose of sodium amytal. In these particular patients labor pains did not seem to be diminished, the patients were not too much narcotized and they were able to do as they were told and worked with their pains, with the addition of N_2O-O analgesia in the later stages. The next day they retained only a very hazy memory of the events in the delivery room. To me this seemed a very ideal handling of a patient in labor, but I wish to repeat that these were only a very few cases and no hasty conclusions should be drawn.

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H. A. THOMPSON, M. D. (907 Medico-Dental Building, San Diego).—I must say I feel that our safest and most satisfactory method depends on the use of nitrous oxid or ethylene, which I prefer with oxygen. I think we all agree on the toxicity of chloroform, both for the mother and baby. I have found the use of scopolamin very uncertain, and in the later stages I feel the use of morphin gives us too many babies requiring resuscitation.

I agree with Doctor Wood that moderate doses of sodium amytal, followed by gas and oxygen in the later stages, may be very satisfactory. The larger doses of sodium amytal have proved to be so depressing on the respirations of some patients that I am afraid of them.

I prefer ethylene to nitrous oxid, as I think we get a quicker and better relaxation when needed, and it often is very desirable when contractions become rapidly more severe at the time of delivery. When given with a high percentage of oxygen our patients do not complain of the odor and I believe, in hospital work, with the observance of proper precautions, there is little or no danger of explosion. We have used it over several years' time and have found no reason to abandon it.

MEASLES—ITS PROPHYLACTIC TREATMENT WITH THE BLOOD OF IMMUNE PERSONS*

By CLIFFORD SWEET, M. D.
Oakland

DISCUSSION *by J. R. Jimerson, M. D., Long Beach; William M. Happ, M. D., Los Angeles; H. E. Thelander, M.D., San Francisco; Andrew J. Thornton, M. D., San Diego.*

MEASLES has long been known to be a dangerous disease. Among aboriginal peoples, who have not developed any racial immunity, the mortality is very high. Individual immunity is rare except as it is conferred by the disease or by injection of immune serum. Hermann in Abt's "Pediatrics" [1] states that approximately three per cent of all individuals are naturally immune. The morbidity during an epidemic is approximately determined by the number of nonimmune persons who come in contact with another who has the disease.

IMMUNITY

The immunity produced by an attack of measles is generally lifelong, so that usually the patient who says he has had the disease two or three times is mistaken. However, that the rule of immunity after an attack is not absolute may be indicated by the number of young adults who had measles while in cantonments during the World War. Most of these men with whom I talked were certain that they had measles during childhood. Nevertheless they had severe attacks with many severe complications, so that measles was preceded only by influenza in the list of death-dealing diseases among American troops. In spite of these facts the degree of immunity following an attack must be a very high one since such a small amount of the serum (10 to 20 cubic centimeters) or of the whole blood (20 to 30 cubic centimeters) will protect a nonimmune person wholly or in large part many years after the donor has had the disease.

* Read before the Pediatric Section of the California Medical Association at the sixty-first annual session, Pasadena, May 2-5, 1932.

MEASLES A GRAVE DISEASE

Even among perfectly healthy children an attack of measles cannot be considered without some fears concerning the outcome. In this country nearly ten thousand deaths are reported annually, while Debre[2] and Joannon[2] of France have reported measles as the leading cause of child mortality during the first ten years of this century. During this period one million deaths were reported in the principal countries of Europe.

There are often important reasons for protecting a child from an attack of measles. Congenital immunity lasts from five to eight months, but cannot be depended upon to outlast the first five months of life. The largest number of deaths from measles occur under two years of age (55.3 per cent) and the next largest (31.5 per cent) during the second year. After the third year the mortality rate declines rapidly, although nearly 90 per cent of all deaths occur in the first ten years.

Poor physical condition; acute illness at the time of exposure; proved or suspected latent, recently healed or active foci of tuberculosis are among additional reasons for avoiding, if possible, the brunt of an attack of measles.

In 1917 Tunnicliff[2] described a diplococcus from the blood of measles patients which was found with great regularity. Later, Tunnicliff reported 105 persons inoculated with immune goat serum who had a negative history of measles. Her summary is as follows: (1) Goats have been immunized with green-producing measles diplococci and their filtrates, and an antibacterial and antitoxic serum was produced. (2) From four to six cubic centimeters of immune goat serum was given to children one year or older and to a few nurses with a negative history of measles after definite exposure. All persons who did not receive serum and all who received serum five days or more after the exposure developed measles. Goat serum prevented measles in 45 per cent of persons who received serum on the fourth day after contact with measles patients and in 97 per cent of those who received it within the first three days after exposure. (3) All infants under one year of age who received serum later than the fourth day after exposure developed measles. Ninety-eight per cent of infants given serum within the first four days after exposure failed to show any signs of the disease. (4) Reactions to the goat serum were observed in 12 per cent of those injected. (5) Although the duration of passive immunity with immune goat serum, as with human convalescent serum, is only a few weeks, the serum appears to be useful in preventing measles in very young and sick children, and in stopping epidemics in institutions where the inconvenience of an epidemic is great and the mortality may be high.

In 1921 Di Cristina of Italy announced that he had obtained from scarlet fever and measles cases minute anaërobic diplococci which grew in an unusual manner in special media. Coronia joined in the investigations later. Probably the most notable aspect of the work of Coronia and his associates is the production of the antimorbillous vaccine with which they claim they have produced both active and passive immunization.

CONVALESCENT SERUM

Berney[3] summarizes the earlier use of convalescent serum as follows: As early as 1896, convalescent measles serum was used therapeutically by Weisbecker in Germany; and Leydens, Huber, and Blumenthal treated a small series of measles cases in 1897. For prophylaxis, however, Cenci was the first one to use convalescent serum in 1901. In 1916, Nicolle and Conserl, two French physicians practicing in Tunis, successfully used the convalescent serum in the prophylaxis of measles. They published their report in 1918. The same year Park and Zingher used it in forty-one very recently exposed children at the Metropolitan Hospital. Twenty of these children received eight cubic centimeters of the serum and none of them developed measles. Twenty-one received four cubic centimeters and three developed the disease—one on the fifteenth day, one on the seventeenth day, and one on the twenty-fifth day after the serum was given. Richardson and Connor some time later produced passive immunization in fourteen persons with complete success.

It was not, however, until Degkwitz, working in 1919 in Munich, published his results in 1920 that large series of cases were reported and interest began to be manifested in the convalescent serum. In his first account he reported a series of over seven hundred patients successfully inoculated for passive immunization. During the following three years he successfully immunized five thousand children by his method. The results were very favorable, and in the small percentage in which the disease was not prevented it was much lessened in time and severity, and complications practically did not occur.

The method, as carried out by Degkwitz, is the sterile collection of blood seven to nine days after defervescence. He allows it to clot and uses the serum intramuscularly after sterility and Wassermann tests have been done. The serums are pooled and kept on ice with one minim of five per cent phenol added to every 40 cubic centimeters of serum. He established a system of dosage by calculating what he termed the "unit dose," which is from 2.5 to 3 cubic centimeters of mixed serum given before the fourth day of incubation, which is sufficient to protect a child up to the age of fourteen years. If serum from a single donor is used, at least 4 to 7 cubic centimeters must be used. The lower dosage is given only when the serum has been pooled from a number of donors. Injections made on the fifth or sixth day require two units (5 to 6 cubic centimeters) for protection, while on the seventh day the results are uncertain, and on the eighth day, or thereafter, they have no effect on immunity. If smaller doses are given early, passive immunity is not produced, but a mild case of measles results, lessened in virulence and course, the child usually having fever for only twenty-four hours and without the occurrence of any complications. (This modified attack produces active immunity, which is the more valu-

able, except perhaps in institutions where the desire is to stamp out the epidemic at the earliest possible moment.)

Forbes and Berryman[4] used whole blood from a family donor, withdrawn on the first or second day after the temperature fell to normal. In this manner the younger children in a family were protected on the fifth or sixth day after exposure by 6 to 12 cubic centimeters of whole blood injected intramuscularly. Eighty-five per cent of their cases developed modified measles without complications. They used small doses in order to produce modified measles with permanent immunity rather than complete protection with immunity for a short time only.

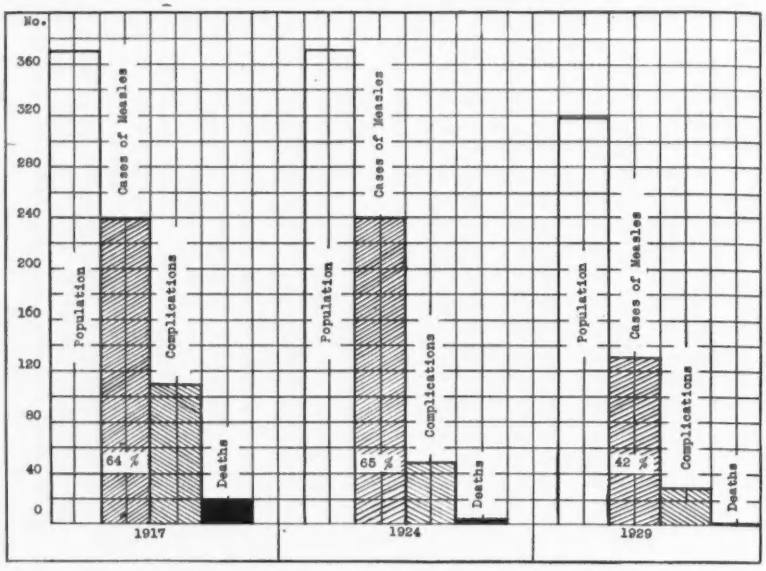

Chart 1.—A comparison of the end results of three epidemics of measles which occurred in the institution during the years 1917, 1924 and 1929. 1917—untreated. 1924—treated during active stage of disease. 1929—active as well as prophylactic treatment. After Barehberg, J. A. M. A., July 5, 1930.

ADULT SERUM AND WHOLE BLOOD

Degkwitz was also among the first to use blood serum from parents who had previously had measles. His results were such that he discontinued this practice, but others have persisted in it.

Von Torday reported 116 injections of adult serum, 20 cubic centimeters being given on the second to the sixth day following exposure, with failure to obtain protection in only twelve cases, and the measles that resulted in these cases was mild and attenuated.

Salomon used adult serum (from 10 to 15 cubic centimeters) for prophylactic purposes in seventy-six infants, but in only half the cases was it successful. Kutter used adult serum in fifteen children (from 6 to 15 cubic centimeters) on the fourth day of the incubation with only one failure. Gerlach used it with success in doses of from 20 to 30 cubic centimeters, the whole defibrinated mass being taken. Goebel observed that inoculation with adult blood caused only one failure in twenty-two cases in which he tried it. Zingher[5] notes that a modified measles can be produced by the intramuscular injections of whole blood or serum from adults; 10 cubic centimeters of serum should be used, and if whole blood this amount (20 cubic centimeters) should be doubled. Zingher does not report any cases in which this method was used. Debre and his coworkers were successful in using adult whole blood. Hilsinger injected 20 cubic centimeters of adult blood into sixty persons from one to fourteen years of age. It was injected intragluteally, either directly or after 10 per cent of a 3 per cent sodium citrate solution was added. As a rule, ten escaped, twenty had the disease mildly, eighteen had regular measles, five had the disease severely, six had the disease severely with complications, and one of the patients died. Kovacs reported thirty-nine cases in which thirty-five of the patients escaped, three had abortive measles, and one had definite but mild measles.

Karelitz and Levin[6] reported fourteen cases in which adult blood or serum was given for the prevention of measles. The whole blood was given intravenously, the serum by intramuscular injection. Of these fourteen patients, three developed measles, two of the cases being in modified form, and one a moderately severe attack with prolonged incubation.

Bivings[7] reports the use of adult blood serum (from 6 to 25 cubic centimeters, depending on the age) for the prophylaxis against measles or the production of modified measles in children exposed to the disease. In his preliminary report he cites nine cases, three in which the disease was escaped and six in which it was mild. In a later series Bivings and Dickson report that twenty-three children were given adult blood serum following definite exposure. Eleven of these developed a very mild form of the disease, and twelve did not have any symptoms of measles.

Pasani-Casa injected from 30 to 40 cubic centimeters of the whole blood for the control of an epidemic in the Padua pediatric clinic as well as in private practice. He used, in addition, the blood of older brothers and sisters who had previously had measles. His material included thirty-three cases; fifteen of the patients obtained complete protection, seven had abortive forms without eruption, ten had extremely attenuated measles, and one had ordinary measles. There was no postmorbillar complication in any of the cases, and no death. On the basis of this experience, he credits this method with evident practical value,

TABLE 1.—*Whole Convalescent Blood as Prophylactic Treatment of Measles*

Name	Whole Blood	Donor	Donor's Measles	Exposed	Date Injected	Incubation Period	Result
G. B.	30 c. c.	Mother	20 years	Brother 4-23-30	4-26-30	17 days	Very mild, scarcely recognizable measles
J. B.	25 c. c.	Mother	22 years	Sister 4-30-30	5-2-30	14 days	Mild measles; little cough; fever 101 one day; Koplik +
S. B.	20 c. c.	Mother	22 years	Sister 4-30-30	5-2-30	15 days	Not seen; mother reported very mild measles
C. A.	60 c. c.	Brother	3 years	Sister 6-4-30	6-5-30	.....	No measles; patient in bed with infiltrative pulmonary tuberculosis
R. A.	30 c. c.	Mother	24 years	Playmate	.....	.....	No measles
D. C.	30 c. c.	Mother	20 years	Playmate 4-7-31	4-10-31	15 days	Not seen; mother reported very mild measles
J. T.	30 c. c.	Mother	18 years	Playmate 3-7-31	3-11-31	.....	No measles; 18 months of age
C. C.	30 c. c.	Mother	20 years	Playmate 4-28-31	4-30-31	12 days	Mild measles; fever 103 one day, 102 one day; Koplik + (Dr. A. J. Scott)
B. B.	30 c. c.	Mother	25 years	Playmate	4-25-31	15 days	Exact date of exposure not known; mild measles; fever 101
M. T.	30 c. c.	Mother	23 years	Brother 4-16-31	4-19-31	12 days	Not seen; mother reported severe measles
J. C.	30 c. c.	Mother	19 years	Playmate 5-18-31	5-23-31	.....	No measles; patient six months of age
E. M.	30 c. c.	.....	.....	Playmate intimate exposure	5-18-31	.....	No measles
L. M.	30 c. c.	.....	.....	Playmate intimate exposure	5-18-31	.....	No measles
M. S.	30 c. c.	.....	.....	5-16-31	5-20-31	.....	Record lost
R. S.	30 c. c.	Mother	20 years	5-4-31	5-9-31	6 days	Very mild measles; fever one day
F. S.	30 c. c.	Mother	20 years	5-4-31	5-9-31	6 days	Very mild measles; fever two days
M. B.	30 c. c.	Mother	21 years	Playmate 6-26-31	6-29-31	.....	No measles
S. B.	25 c. c.	Mother	21 years	Playmate 6-26-31	6-29-31	.....	No measles
S. E.	30 c. c.	Mother	23 years	Sister 5-20-30	5-23-30	18 days	Very mild measles; few macules on face; mild fever two days; Koplik +
J. W.	30 c. c.	Father	25 years	Cousin 3-4-31	3-7-31	12 days	Very mild measles; reported by telephone
P. W.	30 c. c.	Father	25 years	Cousin 3-4-31	3-7-31	16 days	Very mild measles; reported by telephone
M. O.	25 c. c.	Mother	.....	Playmate	.....	.....	No measles
F. L.	60 c. c.	Father	25 years	Playmate 5-9-31	5-12-31	16 days	Very mild measles; fever mild two days; few macules; Koplik +; recent severe infection with tuberculosis
K. S.	30 c. c.	Mother	20 years	Brother	5-10-30	15 days	Very mild measles; few macules; Koplik

as it immunized completely or greatly attenuated a disease that may assume a grave course.

Zoepffel reports eighteen children to whom whole blood was given in the incubation period, sixth to seventh day. Five of them did not contract measles, ten showed a modified form of the disease, one had moderately severe measles complicated by otitis media, and two developed the disease later and apparently from another exposure.

Bader [8] concludes as follows: In a series of thirty patients, from six months to forty-two months of age, from 20 to 30 cubic centimeters of whole blood of persons recovered from measles, two to twenty-five years previously (except in one case in which 10 cubic centimeters was used from a cousin three months convalescent), was given intramuscularly. This blood, which was given within the first seven days following exposure, completely protected twelve patients, so far as escape of measles is proof of protection, and was followed in nine by a modified and attenuated measles without catarrhal symptoms. In eight patients, mild catarrhal symptoms were present. One child had measles of moderate severity and she was the only one of the thirty known to have had Koplik's spots and a typical eruption. In the others in whom eruptions were present they were not characteristic. There was a distinct modification of the temperature except in two instances. There seems to have been prolongation of the incubation in all except possibly four. There were no complications.

TABLE 2.—*Convalescent Serum Given to Prevent Onset of Measles*

Name	Convalescent Serum	Donor	Exposed	Injected	Result
J. C.	30 c. c.	Child recovered from measles two weeks	Child in next ward bed 5-15-31	5-16-31	Child had acute mastoid at time of exposure; no measles developed.
C. R.	20 c. c.	Nurse recovered from measles three months	Brother 6-15-23	6-17-23	Child had acute mastoid and was running continuous fever; no recognizable measles developed.

It would seem that whole blood from adults long recovered from measles is an effective weapon against measles.

Barenberg[9] and his coworkers report the following results:

"Of the fifty-six children who had received 30 cubic centimeters of adult blood, forty-three, or 77 per cent, developed measles. Twenty-three, or 53 per cent, of these cases were of the modified or attenuated type. Thirteen children remained free from the disease, although they had been exposed to measles throughout the epidemic, which lasted two months. Since the entire uninoculated group of twenty-three children came down with measles which in no instance could be classed as attenuated, it must be concluded that thirty-six, or 64 per cent, of this group were definitely benefited by the use of adult whole blood. It should be stated that attenuation resulting from this blood was not quite so pronounced as that noted from the use of convalescent serum. The increase in temperature in the attenuated disease was moderate, with an average duration of three days; the catarrhal symptoms were either absent or very mild; Koplik spots were present in about 50 per cent of the cases; the rash in some instances was scanty, in others widespread but never confluent. Of great importance was the fact that these children did not appear ill. They were almost invariably either sitting or standing in their beds and showed no signs of discomfort. No complications developed.

"Attenuation depends on the day of the incubation period on which the injection is given; when it was given in the course of the first five days or from one to eight days prior to incubation, modification resulted in twenty-three out of twenty-six children.

"Nineteen children, or 34 per cent, of those who received adult whole blood, were not protected. Seven of these received the injection of blood too late; in other words, from the seventh to the tenth day of the incubation period, whereas ten were infected with measles from twelve to twenty-three days after receiving the inoculation and thus were deprived of the protective value of the blood.

"The proportion of complications in this group was 14 per cent, as compared to 35 in the control group. It may be noted that the complications occurred in those children who did not come down with the attenuated form of measles. The complications consisted mainly of otitis media, whereas in the control group two children also developed bronchopneumonia. Had we known that the protection with 30 cubic centimeters of adult whole blood does not last longer than eight days, we could have diminished the number of complications by repeating the injections."

They also present the result of three epidemics of measles in their institution—1917, 1924, and 1929. (Refer to chart on page 256.)

The conclusions of Barenberg and his coworkers are:

"1. Convalescent measles serum is the most effective prophylactic measure against measles, but its application is limited because of its lack of availability.

"2. The blood of normal adults who have previously had measles is of great value in bringing about an attenuated form of measles and is the most practical method of prophylaxis.

"3. We failed to confer protection or to mitigate the disease by means of immune goat serum (Tunnicliff)."

COMMENT

While my own experience has been with a limited number of cases only, all in private practice, it has been sufficient to confirm the favorable results reported by others and to cause me to recommend the use of whole adult blood, or convalescent blood or serum, as an excellent means of preventing or modifying measles.

Perhaps it should be used only for very young children or those who are ill, as it may be that the immunity produced by protective injection and modified measles may not give as effective protection as an unmodified measles does. The passage of years and the exposure of healed children to other epidemics will settle this.

As shown in Table 1, twenty-four children were injected with whole adult blood between the third and fifth days after exposure. Of these, fourteen developed measles, thirteen very much modified, and one apparently unmodified. The remaining ten did not develop measles and, while presumably exposed, may not have been brought into actual contact with the virus. Two, one in each group, evidently had pulmonary tuberculosis and so were given larger amounts (60 cubic centimeters) of blood; one from the father, developed a very mild measles without evident effect on the progressive healing of his tuberculosis; and the other from a brother who had measles only three years before with complete protection. The latter child was injected within twenty-four hours after exposure.

Two children with acute mastoiditis were given 30 cubic centimeters and 20 cubic centimeters of convalescent serum with complete protection (Table 2).

About two-thirds of the children were given the blood intraperitoneally, some with citrate added and some without. One child who received 30 cubic centimeters of uncitrated blood had some sharp abdominal pain the following day which, however, seemed to be based upon an attack of follicular tonsillitis. All others who were given the blood intraperitoneally suffered no discomfort, while those who received it intramuscularly made considerable complaint and had sufficient discomfort to interfere with play for a day or two. I suggest that the blood be citrated and given intraperitoneally whenever there is no question of aseptic technique. Two were given convalescent serum on the first and second day after exposure in large amounts, with the desire of preventing measles. Neither had measles.

CONCLUSIONS

Convalescent blood or serum as well as adult whole blood or serum offers an efficient means of preventing or modifying measles if given in sufficient amounts between the first and fifth days after exposure.

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DISCUSSION

J. R. Jimerson, M. D. (1723 East Third Street, Long Beach).—Doctor Sweet presents an exhaustive review of the literature on seroprophylaxis in measles from the standpoint of a practical mind. Such an accomplishment has necessitated the exclusion of a tremendous amount of accumulated material of scientific significance and interest but of little value to the practicing physician. For the individual interested in a more detailed account of this work, I would endorse Dr. I. Kato's "The Bacteriology and Serotherapy of Measles: An Historical and Critical Review of the Literature on Experimental Aspects of Measles" (*American Journal Diseases of Children*, Vol. 36, No. 3).

Griffith and Mitchell state that measles is one of the most readily contracted diseases of its class, the susceptibility to it being so great that the spread of infection is little controllable. This fact, combined with a high morbidity and mortality so often observed during an epidemic, demands that protective measures be applied if available.

Vaccines and commercial animal serums have not proved satisfactory in the practical field, whereas the author points out, "Convalescent serum or blood, as well as adult whole blood or serum, offers an efficient means of preventing or modifying measles if given in sufficient amounts between the first and fifth days after exposure." The production of modified measles by either method is obviously the desired result for the average healthy uninstitutionalized child seen in private practice, and the creation of permanent immunity would be a most desirable result. However, more data concerning dosage for attenuation and whether permanent immunity may thereby be relied on is badly needed.

Degkwitz, in an early report, stated that "if pooled convalescent serum was given in small doses early during the period of incubation a benign form of measles resulted with subsequent active immunization." The scheme offered by Forbes and Green of Denver attains this same result in a high percentage of cases, but is only applicable in families of two or more children and offers no protection for the elder sibling. In the author's series of twenty-four cases, fourteen were given large doses of adult whole blood early during incubation, yet modified measles developed.

Convalescent serum is seldom available during the early stages of an epidemic, but, as pointed out by Doctor Sweet, parental or professional donors are always at hand to supply a practical and fairly efficient means of preventing measles or so attenuating its course that complications rarely occur.

*

William M. Happ, M. D. (523 West Sixth Street, Los Angeles).—In blood from persons who have had measles we have a valuable agent for use in the prevention of measles in susceptible children. Unfortunately this method is limited in its scope, and does not offer a means of immunizing the susceptible portion of the community, as is, for example, the patient with diphtheria immunization. Immunity, acquired by the injection of blood from convalescents or from adults who have had measles, is generally not lasting, and the individual may on later exposure acquire the disease in a severe form. As Doctor Sweet has stated, the method is useful chiefly in the protection of ill, weak, or convalescent infants or children at a time when the disease may prove serious or perhaps fatal. It is particularly valuable in children's hospitals and foundling homes in protecting sick and weak children and in stopping the spread of epidemics. This latter is of great importance. If immediately on the outbreak of the first case in an institution all the remaining children in that ward or institution are immunized, the outbreak of a serious epidemic may be prevented and lives saved.

Reviews such as Doctor Sweet has given here are very valuable in presenting a résumé of existing knowledge, and the present review covers the literature in a very comprehensive manner.

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H. E. Thelander, M. D. (384 Post Street, San Francisco).—It has been too generally assumed that modified measles produces as good immuntiy as a typical attack. Doctor Sweet is one of the few authors to call attention to the fact that we have no definite evidence to date that this is the case. For the past three or four years we have used both convalescent serum and adult blood prophylactically in private practice and hospital wards. In our practice we have careful records on seventy-four patients thus treated. Of the seventy-four, two patients who developed modified measles after exposure and prophylactic serum, developed two years later, after another exposure, a well-recognized measles. One of these had received parents' blood and the other convalescent serum after the first exposure. The protection afforded by adult whole blood in doses varying from 10 to 30 cubic centimeters, depending on the age of the child and the length of time after exposure that it was given, was practically the same as that of convalescent serum in 3 to 5 cubic centimeters; the former gave complete protection to 43 per cent, and the latter to 42 per cent. Three children receiving parents' blood had moderately severe measles after incubation periods of seventeen to nineteen days. Our knowledge of immunity, particularly in the virus diseases, is based largely on conjecture and analogy, both of which may lead to serious fallacies in interpretation of findings.

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Andrew J. Thornton, M. D. (3235 Fourth Street, San Diego).—There seems to be little doubt that a fair number of people have measles more than once. Besides my own observations on the subject, I have in mind a physician, whose judgment I respect, who observed three distinct attacks of typical measles in his own son. Whether it is due to individual oversusceptibility or to the fact that some epidemics are more severe than others is difficult to state. The value of convalescent serum or whole blood as a means of protecting individuals from measles has been amply proved.

My personal experience is limited to a small series of cases, but the splendid résumé of the literature on the subject by Doctor Sweet, together with his own series of cases, leaves no doubt in our minds that measles can be prevented or that it can be modified, depending on the potency of the serum or blood used and the time of injection after exposure.

The question in our mind is, just what use should be made of this preventive measure. What type of child or group of children should receive it as a routine measure. While this question will be settled by the individual physicians differently, it seems to me certain principles should guide us in its use. Measles epidemics come more or less regularly every two years. During such a wave of the disease a certain class of children, either because of their age or general state of health, make up the mortality list or a very large percentage of it.

Bearing these facts in mind we, as practitioners of preventive medicine, should "broadcast" to our patients under such circumstances the fact that measles prevention and measles modification are available and should be used.

THE LURE OF MEDICAL HISTORY*

HIERONYMUS FABRICIUS AB AQUAPENDENTE†

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II

LET us now examine the volume referred to in the March issue of CALIFORNIA AND WESTERN MEDICINE. It is a collection of five works by Fabricius, but there is no general title page to that effect; only on the back of the volume is this indicated, where we read: *De Formato Fœtu et alia opuscula.* It is a folio, about 11½ by 16½ inches, beautifully printed in large type, with very wide margins, on excellent paper; the initials and endpieces are well-executed woodcuts, and the great value of the volume is in the exquisitely engraved copper plates with which the several works are profusely illustrated; all of these are full-page plates except a number which are double page. On the second fly leaf is pasted the title page of the first edition, printed at Venice by Bolzetta in 1600; there is no title page by the printer of the ensuing work. Perhaps there had been one which was removed in order to substitute the very beautifully designed and executed Venice title page. It reads: *Hieronymi Fabricii ab Aquapendente De Formato Fœtu. Venetiis. Per Franciscum Bolzettam. 1600.* The colophon, however, indicates the Paduan printer and date: *Patavii. Ex Typographia Laurentii Pasquati, Impress. Almæ Universitatis Juristarum. Anno Domini MDCIV.* Lorenzo Pasquati is also the printer of the next work in the volume: *De Venarum Osteolis.* This work is dated 1603; on the title page the author's name is qualified with "Anatomici Patavini"; that is, Professor of Anatomy at the University of Padua. There is no colophon. The third work in the volume, on the embryology of birds, is entitled: *Hieronymi Fabrici ab Aquapendente olim anatomici Patavini celeberrimi De Formatione Ovi et Pulli tractatus accuratissimus ad Illustris. & Reverendis. D. D. Carolum Mediceum S. R. E. Cardinalem Amplissimum. Patavii ex officina Aloysii Bencii Bibliopolæ.* 1621. The "olim" and "celeberrimi" and the date remind us that Fabricius had died in 1619 and that this work is posthumous. The dedication to the Cardinal is written by Joannes Prevotius of the Paduan faculty of medicine. No colophon. The fourth work, a delightful essay on the speech of the lower animals, resumes the chronological order, and is entitled: *Hieronymi Fabrici ab Aquapendente Anatomici Patavini De Brutorum Loquela. Patavii, Ex Typographia Laurentii Pasquati. MDCIII.* There is a dedication by Joannes Ursinus, Ph. D., M. D., Padua, to the "Illustrissima Heroina Hedvigi Mielecka de Kormanice." The author is spoken of by Doctor Ursinus as (retaining the ablative of the sentence) "Doctissimo Viro, Academiæ quidem Patavinæ Supraordinario Medico & Chirurgo, Anatomes vero singulari & incomparabili Professore, Hieronymo Fabricio ab Aquapendente." Why Doctor Ursinus instead of the author offered the work to the heroic Polish lady does not appear, but there is mention of the mutual admiration of the two. Let us hope romance is hidden in it. The fifth and last work included in this volume is an inquiry into the physiology of human speech. It is from the same press and of the same date as the fourth. The title page shows that the work was edited by Doctor Ursinus in 1601, from which we may infer that the same editorship was true of the preceding work. The title reads: *Hieronymi Fabrici ab Aquapendente Philosophi ac Medici in Florentissimo Gymnasio Patavino Anatomes et Chirurgiæ Professoris Publici Singularis et Supraordinarii De Locutione et eius Instrumentis.* Here again is a dedication by the editor, to a young Polish noble, Thomas Zamoyski. Between the dedication and the body of the work, contrary to custom, the index occurs. Following the text is a beautiful engraving of a dissection of the organs of speech; the opposite page, containing the explanation of the dissection, is pasted to the fly leaf corresponding to the one on which the title of the first work in the volume is pasted.

Returning to this first work, *De Formato Fœtu,* it is seen to be rightly placed first; it occupies nearly half of the volume (152 of the 328 pages) and originally appeared prior to the other contents, though the edition here is subsequent to the second, fourth, and fifth work in the volume. As to its value in medical history, I shall quote from an article by Dr. Joseph Grindon of St. Louis, a charming review of the life and writings of Fabricius, in the *Interstate Medical Journal* for August, 1906; Doctor Grindon's article does not mention the book we are concerned with, but one printed at Leipsic in 1687, a volume of the Opera Omnia of our author, which happens to contain some of the items in the one before us, beginning as it does with *De Formatione Ovi et Pulli,* followed by *De Formato Fœtu,* of which Doctor Grindon says:

"The author draws largely on the opinions and work of his predecessors, fortified and illustrated

*A Twenty-five Years Ago column, made up of excerpts from the official journal of the California Medical Association of twenty-five years ago, is printed in each issue of California and Western Medicine. The column is one of the regular features of the Miscellany Department of California and Western Medicine, and its page number will be found on the front cover index.

† Part I of this article was printed in the March issue of CALIFORNIA AND WESTERN MEDICINE, page 173.

Fig. 5.—Figure xlv, Plate xxii, of *De Formato Fœtu*. It shows the position of the fetus of a mare, but the amnion membrane beneath is removed. A, A, A, the amnion. B, B, B, vessels spread through it. C, C, C, C, the three trunks of the umbilical vessels wrapped around each other.

by his numerous researches bearing upon the comparative anatomy of gestation. This folio contains thirty-three full-page plates figuring pregnancy in man, the sheep, cow, horse, swine, dog, rat, mouse, guinea-pig (thus early a contributor to science), the shark and the serpent. In fact, it is on this work, together with his observations on the valves of the veins, that Fabricius' chief claim to the admiration of posterity must rest. It is not extraordinary that he should defend certain errors. Thus he maintains that the vessels of the placenta communicate with those of the uterus, although Arantius had proved the contrary some years before. According to him, man has no allantois. It was generally believed at that time that the amnionic fluid was urine, some holding that it escaped by the urethra, although the prevailing opinion was that it passed along the urachus and umbilical cord, spread out between the chorion and amnion, and filtered out through the latter. Fabricius declares that it passes out in this manner to the chorion. However, he holds that the urachus does not consist of a single tube, but of a bundle of minute hollow fibres."

Charles Singer, lecturer on the history of medicine at the University of London, in his *Evolution of Anatomy*—a valuable and entertaining book—says of *De Formato Fœtu:*

"This is a magnificent comparative study of the embryo in the more advanced state, and is the first work of its kind. It describes developmental stages in a long series of animals: man, rabbit, guinea pig, mouse, dog, cat, sheep, pig, horse, ox, goat, and deer among mammals; the smooth dogfish among fishes; and the viper among other creatures. In the figures a good deal of attention is given to the heart and the ductus arteriosus and the foramen ovale are frequently shown. In the text special attention is drawn to the structural changes in the vascular system incident on birth. The work contains the best figures up to its time of the human gravid uterus and membranes and of the human placenta. It includes a series of fine demonstrations of the course and relations of the umbilical vessels, and dissections of various parts of the human fetus. Even more detailed is the investigation of the uterus, placenta, membranes, vessels, and fetus of the sheep. The book also contains the earliest figure of the heart of a fish."

It is illuminating to reread the brilliant review of embryology by Dr. A. W. Meyer of Stanford University, published in CALIFORNIA AND WESTERN MEDICINE in the eight issues from December 1931 to July 1932, in which are several references to Fabricius and specifically to *De Formato Fœtu*. Doctor Meyer makes Fabricius' place in the history of medicine quite clear, especially what Harvey owed him in his study not only of the circulation of the blood but even more of embryology. It is fascinating to read Doctor Meyer's explanation of the theories that in turn were accepted, and in doing so we learn much about Fabricius. A brief extract must serve here:

"Fabricius, whom Singer regards as 'the effective founder of modern embryology,' had expressed the opinion that most animals come from ova . . . and held that the chalzæ do not represent the sperm of the cock but take part in the formation of the embryo. . . . 'The foetus of animals,' he declared, 'is engendered in one case from an ovum, in another from the seminal fluid, in a third from putrefaction or by the spontane-

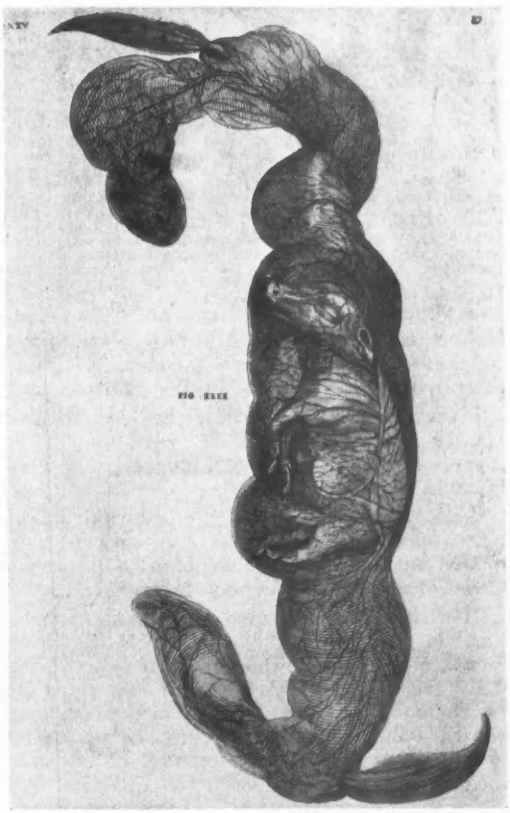

Fig. 6.—Figure xii, Plate xxv, of *De Formato Fœtu*. Figure xlix shows a fetus taken from the uterus of a sow, surrounded by three membranes. A, A, the appendages of the allantois. B, B, the extremities of the chorion, which are three times longer than the fetus itself, and without the caruncles. C, C, C, C, the vessels of the chorion.

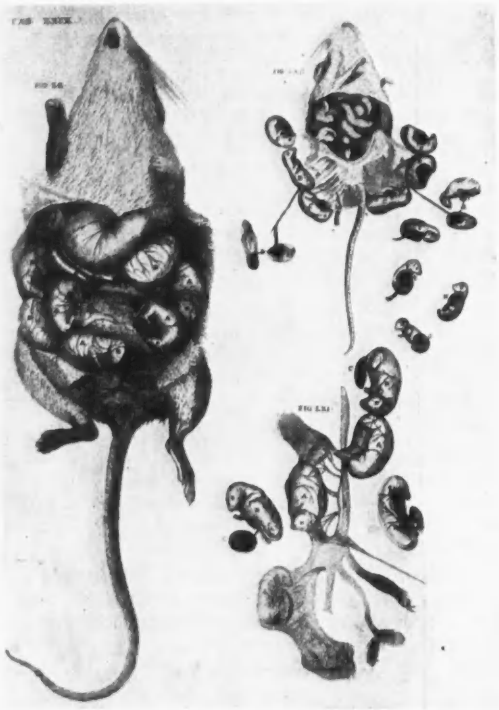

Fig. 7.—Figures lx, lxi, and lxii, Plate xxix of *De Formato Fœtu*. Figure lx shows a larger house-mouse with seven fetuses in various positions. A, A, A, A, the four more conspicuous fetuses. B, B, B, the three less conspicuous fetuses. C, C, the intestinal colon. Figure lxi shows the uterus separated from the body, and six fetuses. A, A, A, three fetuses involved in their membranes. B, B, B, three others deprived of their membranes, showing the placenta in different ways. C, C, C, the placenta of each fetus. Figure lxii shows a mother of the smaller house-mouse, with six fetuses and their position; also, the divers positions of the placentae. A, A, both corneae of the uterus. B, B, some of the fetuses with their heads upwards. C, C, C, C, four fetuses with their heads declining downwards to the mouth of the uterus. D, D, placentae. F, F, F, F, four fetuses separated from the uterus. G, the placenta appended to the loins. H, the placenta appended to the thorax.

ous act of nature, automatically.' Nevertheless Fabricius described the fetal membranes and apparently saw and described the ovarian vesicles."

Doctor Meyer quotes Willis, who "declared that Harvey wrote his treatise on generation 'in the harness of Aristoteles' and 'with the bit of Fabricius in his teeth.'"

With these few hints of the historical importance of *De Formato Fœtu,* we must pass to the second work in our volume: *De Venarum Ostiolis,** of which Professor Singer says:

"Perhaps the best known work of Fabricius is that *On the Valves of the Veins.* It had much influence on Harvey, who borrowed figures from it and based much of his argument concerning the circulation of the blood on the action of these valves. Fabricius' excellent figures of the valves in the veins are the first in literature. He explored them better than anyone before his time, and they have often been regarded as his discovery. Nevertheless he had not the least inkling of the function of the valves, and regarded them as slowing the flow of blood towards the periphery and thus preventing blood from collecting at the extremities."

In the article already quoted Doctor Grindon observes:

"Although Fernel, Sylvius (about 1555), Amatus Lusitanus, and Cannanus (in 1547) had written of valves in the veins [also Vesalius, we may add]; their descriptions were vague and left much to be desired. Sylvius, indeed, does not seem to have considered them normal and constant structures. Eustachius and Fallopius had denied their existence.

"Fabricius presents the subject in clear and unmistakable fashion. Seven full-page plates depict these ostiola or little doors in various veins. He arrogates to himself the full credit for the discovery, expressing his surprise that no ancient nor modern anatomist should ever have seen the valves until 1574, when he first beheld them *summa cum lætitia.* Yet he could hardly have ignored the work of those who preceded him, since his preceptor, Fallopius, had written on the subject, criticising them."

No one, however, appears to have offered a rational conjecture on the use of the valves or to have traced them through the venous system at large until Fabricius demonstrated their presence in all the veins of the extremities. But he thought they had a subsidiary office in connection with the collateral circulation, supposing that they diverted the blood into branches near the valves. Thus he missed seeing the importance of the anatomical and experimental facts gathered by himself, although he correctly described, and showed in beautifully executed engravings, the direction in which the valves open. To continue in Doctor Grindon's words:

"Fabricius never took the next and, as it seems to us, obvious step: the discovery of the fact that the blood in the veins flows toward the heart. This was left for the more logical mind of his great pupil of undying memory. On the contrary, he explains the use of the valves [aside from the diversion function above mentioned] by saying that they check the excessive torrent of flow toward the extremities and thus prevent their congestion. The latter statement contains a germ of truth, but not as he understood it."

At the time when Harvey was studying at Padua under Fabricius the general notions as to the circulation may be briefly summed up as follows: The blood ebbed and flowed to and from the heart in the arteries and veins. From the right side at least a portion of it passed to the left side through the vessels in the lungs, where it was mixed with air. Lastly, there were two kinds of blood. There was the venous blood, formed originally in the liver, thence passing to the heart, from which it went out to the periphery by the veins, and returned ("ebbed") by them to the heart. Second, there was the arterial blood, containing "spirits" produced by the mixing of the blood with the air in the lungs. The blood was then sent out from the heart to the body, and returned to the heart by the same vessels. The

* Doctor Singer wrote the author of the present study some time ago that a critical edition of "De Venarum Ostiolis" was being prepared by Dr. Kenneth Franklin of Oriel College, Oxford.

pulmonary circulation was understood so far as above described, but its relation to the systemic circulation was unknown. The action of the heart as a propulsive organ was not recognized. It was not until 1628 that Harvey announced his views to the world by publishing his treatise *De Motu Cordis et Sanguinis*. His conclusions are given in the following celebrated passage:

"And now I may be allowed to give in brief my view of the circulation of the blood, and to propose it for general adoption. Since all things, both argument and ocular demonstration, show that the blood passes through the lungs and heart by the auricles and ventricles, and is sent for distribution to all parts of the body, where it makes its way into the veins and pores of the flesh, and then flows by the veins from the circumference on every side to the centre, from lesser to the greater veins, and is by them finally discharged into the vena cava and right auricle of the heart, and this in such a quantity, or in such a flux and reflux, thither by the arteries, hither by the veins, as cannot possibly be supplied by the ingestor, and is much greater than can be required for mere purposes of nutrition, it is absolutely necessary to conclude that the blood in the animal body is impelled in a *circle*, and is in a state of ceaseless motion; that this is the act or function which the heart performs by means of its pulse; and that it is the sole and only end of the motion and contraction of the heart." (Book X, ch. xiv, p. 68.)

The only figures included by Harvey in his great book were taken from his master's *De Venarum Ostiolis*.

(To be continued)

CLINICAL NOTES AND CASE REPORTS

A NEW METHOD OF PROSTATECTOMY

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AND
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THE following preliminary notes on a new procedure for prostatectomy are submitted:

Procedure.—A No. 18 Fr. sound is inserted into the bladder and a suprapubic incision is made over the "Cave of Retzius," which is extravesicular. The bladder is mobilized anteriorly and displaced upward, which exposes the capsule of the prostate gland. The capsule of the prostate is incised for one-half an inch longitudinally, beginning one-quarter of an inch below the bladder. Two hemostats are inserted transversely on each side of the capsule, which is incised between the hemostats. The inferior portion of the capsule is sutured to prevent bleeding, and the hemostats removed. The superior portion of the capsule is displaced upward, carrying the bladder with it, thereby exposing the prostate. The upper two-thirds of the prostate is freed from its capsule by blunt dissection with the finger. The prostatic lobes are removed separately by excision.

Care must be used to avoid accidental opening into the prostatic urethra, which may be a third of an inch in diameter and fusiform in shape in this region.

The bladder is returned to its normal position and sutured to the posterior surface of the pubes. The abdominal wall is closed in layers. A retention catheter is allowed to remain for several days for urinary drainage and lavage. The advantages of the operation are:

1. There is no solution of the continuity of the urethra.
2. Drainage of the surgical wound is unnecessary.
3. Damage to the seminal vesicles is avoided.
4. The ejaculatory ducts are preserved.
5. Absence of shock and hemorrhage.
6. Ease of adequate exposure of prostate.
7. Hospitalization is shortened.

PHYSOMETRA

REPORT OF CASE

By CLEMENT H. ARNOLD, M. D.
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PHYSOMETRA, or gas in the cavity of the uterus, is a rather unusual and startling occurrence. It has been described by Kelly [1] as follows:

"Enlargement of the uterus sometimes follows a cervical operation or occurs in the course of cervical disease, and should always be borne in mind. While this may be due to the extension of growth, it is also frequently the result of a stenosis, with the retention of blood, pus, or gas (physometra), or a combination of these. We are seeing more of these heretofore rare affections since the advent of radium in cervical carcinoma. If a patient has lower median pain she has not felt before some rise in temperature, it is often well to pass an instrument, say a curved artery forceps into the uterus and open it, watching to see whether there is any discharge. A physometra is often explosive in its escape. If there is retention it must be given free exit and watched from time to time."

Hector [2] states:

". . . Most of the reported cases of physometra (gas in the uterine cavity) have been associated with septic abortions or other complications of the puerperium. In such cases the symptoms are grave and the issue usually fatal. The organisms concerned are frequently *B. welchii*, anaërobic streptococci, and *B. coli*." Operation in the case quoted by him, "showed a uterus containing multiple fibroids of varying sizes, some cystic, some calcareous. The uterine cavity was distended and fluctuating. On opening the uterine cavity a considerable quantity of gas escaped with a 'hiss,' followed by one and a half pints of pus with the odor of *B. coli*," . . . there was also present an adenocarcinoma of the corpus.

When the cervical canal is occluded,[3] the uterine cavity is gradually filled with pent-up secretions. If putrefaction with gas has occurred, it is called physometra.

Sleeman [4] gives an uncommon case of physometra, referring to eight others of his own notice, with the clinical picture of *B. welchii* septicemia, extreme anemias (680,000 red cells per cubic millimeter) and in which particular case instrumental interference was suspected but unproven, with a rapidly fatal outcome.

Ottow [5] records a case due to the secondary infection of a large piece of retained placenta; and Doederlein [6] a case of acute anteflexion due to an old ventrofixation occluding the cervical canal and preventing normal delivery, with secondary infection in the lacerated tissues, causing physometra; while Frank [7] states that physometra may develop if gas-producing organisms penetrate secondarily in any gynecologic or obstetric condition.

REPORT OF CASE

Mrs. ———, a widow, age thirty-six, who had always been in good health, was referred to us for pain in both inguinal regions, over the sacrum, in the bladder, which was accompanied by a rather profuse foul-smelling discharge. There had been no bleeding other than the normal menstrual amount.

The patient stated that shortly after her last period, ten days previously, she began, for the first time, to have pain low down in her sides and the discharge which had gradually increased and assumed the odor complained of. She had been in bed for the last two days with a slight temperature, she believed, as she had not summoned a physician. She has been widowed two years, and has one child six years of age whose birth history is normal. She states that her sexual and menstrual life have always been normal.

She admitted occasional sexual contact; states that she had missed no periods. She was very critically questioned as to interrupted pregnancy, but denied it definitely.

Examination at home, revealed a well-built young female apparently not very ill, lying comfortably in bed. Temperature was 99.6; pulse, 115; and with no remarkable physical findings except the following: Some slight tenderness over the pubis and in both inguinal regions, but no rigidity; the uterus just palpable at the pubis, but abdominally not tender. Her outlet showed a moderate relaxation, but no cystocele or rectocele; the urethral orifice was negative.

Vaginal examination showed some tenderness in both adnexa, but no masses. There was a slight erosion on the posterior lip of the cervix, a moderate discharge which had the combined odor of *B. coli* and putrefaction; the uterus appeared about twice its normal size to palpation.

The diagnosis of erosion, endocervicitis, and probable low-grade subacute pelvic inflammatory was made. She was placed upon expectant treatment and P. M. C. douches and told to report to the office when able.

Three days later, in the office, because of the discharge and its odor, a sterile swab was inserted into the cervical canal for the purpose of making smears. There was a slight resistance just within the external os which when overcome suddenly released a small amount of gas, foul-smelling and accompanied by a decidedly audible "hiss." After appropriate preparation a sterile probe was inserted further into the uterine canal, with a repetition of the same phenomenon. The diagnosis of physometra, as an accompaniment of multiple strictures due to a partially obliterating endocervicitis, was added.

Laboratory Report.—The following laboratory report is presented through the courtesy of the Mount Zion Hospital clinical laboratory.

Twenty-four-hour culture of material from cervix and uterine canal: *B. coli*, four plus; *Streptococcus haemolyticus*, two plus; *Streptococcus viridans*, two plus (green pigment forming colonies); Gram-negative diplococci, two plus (*M. catarrhalis* ?).

A moderate cervical dilatation was performed in the office, and further treatment was conservative. The cervical canal was cleaned out three times weekly with hydrogen peroxid and followed with a tampon impregnated with 0.2 per cent formalin in pure glycerin, and she was instructed to use the standard P. M. C. hot douche at least three times daily. She was also given capsules of quinin, grains five, and ergotin, grains one, three times a day after meals to restore uterine tone.

Her discomfort and fever disappeared almost immediately, and she has remained free from such as well as the odor for the past two weeks. Her uterus is normal size; and although there have been no symptoms or signs of malignancy she has been advised to have a diagnostic curettage, with cauterization of the cervix.

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PERFORATED GASTRIC ULCER IN A PATIENT WITH TABES DORSALIS

By JOHN MARTIN ASKEY, M. D.
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ACUTE upper abdominal pain in a patient with known tabes dorsalis, especially if accompanied by vomiting, usually is interpreted as due to a gastric crisis. Coincident occurrence of an acute abdominal surgical condition with tabes is rare, but failure to recognize such coincidence in these patients is disastrous.

We report the following case primarily because of its relative rarity, secondarily to emphasize the necessity of a rigid diagnostic scrutiny of every tabetic patient with severe abdominal pain.

REPORT OF CASE

Mr. D. B. S., age forty-two, had been diagnosed as having tabes dorsalis for ten years, with the usual findings of a sluggish pupillary light reflex, absent patellar reflexes, incoördinate gait, and a strongly positive blood Wassermann reaction. He had suffered intermittently for years with some postprandial epigastric distress, which he had interpreted as due to his blood disease. About six months previous to his present sickness he was seized with severe epigastric pain and vomiting. He was seen by two physicians, and a diagnosis made of a gastric crisis. He was relieved by a hypodermic of morphin, and in a few days was apparently as well as ever.

On October 29, 1926, he had some dull epigastric distress and took nothing but liquids. About eleven at night he suffered an acute attack of mid-epigastric pain. He did not vomit immediately, but, believing vomiting would relieve him, took some fluid extract of ipecac and vomited some "brownish liquid" in the toilet. This was not saved. He was seen at twelve midnight. At this time there was slight rigidity of the upper right rectus muscle. The temperature and pulse rate were normal. He did not appear to be in acute pain.

In view of his known tabetic condition, and the knowledge that he was supposed to have had former attacks of gastric crisis, the latter diagnosis was made tentatively.

A hypodermic of one-quarter of a grain of morphin did not relieve him, and in thirty minutes another one-quarter of a grain was given. This relieved him slightly.

At six the next morning, he was suffering more acutely, there was marked generalized abdominal

rigidity, particularly right-sided, and tenderness in the lower right quadrant. The temperature had risen to 99.4 degrees.

A diagnosis of a perforated viscus, probably a gastric ulcer, was made. He was sent to Saint Vincent's Hospital, where Dr. T. C. Myers saw him, concurred in the diagnosis, and immediately operated. A preoperative leukocyte count was 18,126, with 80 per cent polymorphonuclear cells.

An acutely perforated gastric ulcer on the lesser curvature near the pylorus was found. The opening was about three-quarters of an inch in diameter, with thin sclerotic edges. There was a large amount of gastric contents in the peritoneal cavity.

The opening was closed without posterior gastroenterostomy due to the relatively poor condition of the patient. It had been over six hours since the perforation had occurred. Postoperatively his condition was precarious for several days, but then he steadily improved, and was discharged five weeks later in good condition. Following the operation he still had sporadic trouble, with some postprandial distress and pyrosis, but was comfortable when he was faithful to a bland ulcer diet.

Four and a half years later he suddenly developed severe pain in the epigastrium and umbilical region. At this time he was in a small town seventy-five miles away, and was seen by another doctor. Two days later he was vomiting continuously, and Dr. T. C. Meyers was consulted over the telephone. The possibility of a perforated viscus was stressed and the patient advised to come in to the hospital. This he refused to do until the fourth day, April 5, 1931, after the development of the severe pain, when he was admitted to Saint Vincent's Hospital.

At the time of admission the temperature was 102.4 degrees; the pulse was only 88. There was no abdominal distention or rigidity, but peristalsis was definitely diminished and the leukocyte count was 21,000. A tentative diagnosis was made of perforated gastric ulcer, with generalized peritonitis.

On April 10, 1931, he developed signs of hypostatic congestion in both lungs. His condition became rapidly worse and he died on April 13, 1931.

Necropsy.—At necropsy the site of the ulcer found at operation in 1926 was healed, but in the first part of the pylorus, on the posterior wall, was an ulcer about 1.5 centimeter in diameter and 5 centimeters deep, firmly adherent to the pancreas and mesocolon. There was acute generalized peritonitis, with about 100 cubic centimeters of thick pus in the pelvis. The ulcer evidently had ruptured, then became sealed over by the mesocolon. The histologic examination of the ulcer showed an increase of interstitial fibrous tissue in the muscularis layer, the latter infiltrated with round cells and mononuclear cells.

COMMENT

Stokes [1] in "Modern Clinical Syphilology" describes three types of gastric crises, namely, "the attack of pain without vomiting; the attacks of vomiting without pain; and the most common type, combining both pain and vomiting. Many gradations from abortive to severe forms exist."

It rarely occurs that a perforated peptic ulcer, or another acute abdominal condition exists in the tabetic patient with symptoms of one of the above types, and the diagnosis is apt to be gastric crisis. It is none the less as feasible as the reverse, where the gastric crisis mimics other abdominal disease.

Gastric syphilis with a syphilitic gastric ulcer may occur, but is rare. The coexistence of a nonspecific gastric ulcer with tabes is not so rare. Perforation in either type is a potential menace, and an accurate diagnosis and immediate surgery in such event is essential.

Hunt and Lisa [2] recently reported four cases of tabes dorsalis with associated duodenal ulcers, in only one of which was the ulcer suspected before death. Two died from hemorrhage, one from an acute perforation, and one from peritonitis following a posterior gastro-enterostomy.

In the case here reported, the correct diagnosis was nearly missed, and then made only after the time limit usually considered safe for surgical repair of a ruptured peptic ulcer.

It is interesting to note that the rupture of the second ulcer was due to a new lesion, as the necropsy revealed healing at the site of the first ulcer. The histologic findings were those of a simple ulcer, and suggest the same etiology as that of any peptic ulcer.

CONCLUSION

The investigation of the gastro-intestinal tract of the patient with tabes dorsalis who has gastro-intestinal symptoms, to eliminate possible organic lesions would seem strongly indicated in the light of the above case. A foreknowledge of a gastric ulcer or gall stones would encourage a most meticulous scrutiny in the event of later acute abdominal pain.

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COMPLETE INVERSION OF THE PUERPERAL UTERUS*

By RAYMOND C. HALL, M. D.
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REPORT OF CASE

THE patient is a primipara, twenty-six years old. In 1917 she had an operation for swollen glands in left side of neck; in 1921 a "nervous breakdown"; and in 1927 an appendectomy.

Her last regular menstruation was on March 28, 1930. Pregnancy was normal except for nausea and vomiting throughout. Patient was admitted to San Diego County Hospital on November 24, 1930, for vomiting of pregnancy, and was discharged on December 4, 1930, improved. She attended the prenatal clinic at the County Hospital four or five times. Blood pressure, urinary findings and weight normal. Blood Wassermann negative.

Labor began at 6 p. m. December 25, 1930. Patient was admitted to the Obstetrical Service of the San Diego County Hospital at 7:45 p. m. Membranes ruptured spontaneously at 8:30 p. m. At 9:30 p. m. the intern delivered the patient of a live female baby, weighing five pounds five ounces. He admitted using considerable pressure on the fundus and traction on the cord in order to express the placenta. At 9:40 p. m. the placenta attached to the fundus suddenly came down through the lower opening of the birth canal, carrying with it the entire inverted uterus. At no time had pituitrin been administered to the patient.

The intern at once summoned the resident. The latter telephoned me to come to the hospital. On my arrival in the delivery room at 10:15 p. m., the completely inverted uterus with placenta attached to the

* Read at a meeting of the Los Angeles Obstetrical and Gynecological Society, December 8, 1931.

fundus lay between the patient's thighs. A large hematoma had formed between the placenta and fundus, causing the membranes to bulge out on the right side. The patient was in severe shock, no radial pulse could be felt, extreme pallor and restlessness were noticeable.

Placenta and membranes were removed from the uterus. Under anesthesia the inverted uterus was gently pushed up as far as possible. Then an attempt was made to reinvert the uterus by manipulating it in exactly the opposite direction from which the inversion occurred. In brief, by this method the last part of the uterus to become inverted is the first part to be reversed through the cervix. However, the cervix was too tightly contracted around the neck of the inverted uterus; consequently this attempt at reposition was unsuccessful. The patient was in profound shock and had lost 1,400 cubic centimeters of blood; therefore it was deemed wise at this point to treat the shock and hemorrhage before any further measures toward reposition of the uterus were undertaken. While a suitable donor was being selected for blood transfusion and the operating room being prepared, patient was given 1,000 cubic centimeters of normal salt solution intravenously. General condition improved so that radial pulse was perceptible.

At 11:15 p. m., under ethylene anesthesia, the abdomen was opened through a lower mid-line incision. The uterus was not in the pelvis. A crater was seen in the region of the cervix into which had been drawn the tubes, round ligaments, and the ovaries. Reposition of the inverted uterus was effected by the method described by Huntington.[1, 2] One cubic centimeter of pituitrin was given subcutaneously. The abdomen was then closed in layers.

Immediately the patient was given 500 cubic centimeters of normal salt solution intravenously. On the arrival of the donor for the blood transfusion she was transfused with 500 cubic centimeters of whole blood by the direct method. The patient was returned to the ward in fairly good condition.

On the first postpartum day her blood showed: red blood cells, 3,780,000 per cubic millimeter; hemoglobin (Sahli), 70 per cent; white blood cells, 29,900 per cubic millimeter.

Differential: polymorphonuclear neutrophils, 89 per cent; small mononuclears, 9 per cent; large mononuclears, 2 per cent.

In the afternoon of the fourth postpartum day the patient had a chill. Her temperature was 102 degrees Fahrenheit; pulse, 136; and respiration, 24. On his own initiative the intern gave, intravenously, five cubic centimeters of a 1:1000 solution of metaphen. A culture was taken from the cervix and subsequently was reported to show *Streptococcus hemolyticus*. A culture of both the blood and the urine was negative.

On the fifth postpartum day the temperature dropped to normal and remained normal throughout convalescence. This day the blood showed: red blood cells, 1,700,000 per cubic millimeter; hemoglobin (Sahli), 40 per cent; white blood cells, 11,200 per cubic millimeter.

Differential: polymorphonuclear neutrophils, 76 per cent; polymorphonuclear eosinophils, 1 per cent; small mononuclears, 17 per cent; large mononuclears, 6 per cent.

On the sixth postpartum day the patient was transfused with 500 cubic centimeters of whole blood by the direct method. On the eighth postpartum day the blood examination showed: red blood cells, 3,060,000 per cubic millimeter; hemoglobin (Sahli), 60 per cent; white blood cells, 15,300 per cubic millimeter.

Differential: polymorphonuclear neutrophils, 72 per cent; small mononuclears, 24 per cent; large mononuclears, 4 per cent.

The patient was discharged from the hospital on the seventeenth postpartum day in good general condition. The fundus was firm, small, and in good condition; the cervix was soft and patulous.

The patient did not nurse her baby. She menstruated normally for the first time when her baby was four months old and continued to do so every twenty-eight days until her baby was six months old, when the follow-up was ended.

COMMENT

The earliest description of a complete turning inside out of a uterus is given by Ambroise Paré.[3] In the twenty-fourth book of his work, "Generation of Man," he writes:

"Of the falling downe or perversion, or turning of the wombe: The wombe is said to fall downe and be perverted, when it is moved out of its proper and naturall place; as when the bands and ligatures thereof being loosed and relaxed, it falleth downe into one side or other, or into its own necke, or else passeth further, so that it comes out at the necke, and a great portion thereof appears without the privie parts."

From this definition Paré goes on to describe causes, treatment, and cure.

In 1824 Charles Mansfield Clarke [4] makes use of the term "inversio uteri," and describes the condition we know as inverted uterus. In 1874 Charles Clay, in his "Complete Handbook of Obstetric Surgery,[5] states the following:

"A turning of the uterus more or less inside outward by the inner surface of the fundus passing through the os, reversing its former position—mucous coat outwards, peritoneal coat inwards."

Though medical custom sanctions the use of the term "inversion of the uterus," it must be admitted that a check of numerous obstetrical and gynecological textbooks, both early and recent, reveals no mention of the person who originated the expression "inversion of the uterus." When we consider that the verb invert commonly signifies to turn upside down, then inversion does not appear to be any more medically exact in this connection than the original term "perversion of the uterus" used by Paré, the first man to describe the condition. However, the verb introvert—to draw into or inward—or the verb invaginate, suggest themselves as somewhat more accurate. Would not the term "introversion of the uterus" be more descriptive of this strange accident?

The chief reasons for reporting this case are:

1. To record a case of complete inversion of the puerperal uterus.

2. To stress the fact that no vigorous attempt at replacement should be undertaken prior to restoration of the patient from the effects of shock and hemorrhage.

3. To recommend the treatment of complete inversion of the puerperal uterus by the operative procedure devised by Huntington, since this method does not increase shock, accomplishes the end desired with the greatest facility, and leaves the patient with a functioning uterus.

710 Medico-Dental Building.

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PERFORATED GASTRIC ULCER

"FORME FRUSTE" TYPE—WITH SUPRADIAPHRAGMATIC DRAINAGE OF THE LOCALIZED ABSCESS

By E. H. EISKAMP, M. D.
AND
F. E. BLAISDELL, JR., M. D.
Watsonville

THE case report below is made because of the following points of interest:

1. An apparent "forme fruste" type (H. A. Singer, M. D., R. T. Vaughan, M. D.) of perforated gastric ulcer in which surgery was refused.
2. Apparent spontaneous recovery, followed by: (*a*) A localized subdiaphragmatic abscess and pleural effusion; (*b*) surgical supradiaphragmatic drainage of the abscess.
3. Postoperative lung fistula.
4. Complete recovery.

REPORT OF CASE

Mr. M. S., age thirty-four years, a Japanese laborer, was first seen on June 27, 1932, in answer to an emergency call, sitting up in his bed with thighs flexed on abdomen and in apparent extreme pain. He was perspiring freely, his body cool and clammy, but the pulse was fairly good and there was no extreme shock. His temperature was 97.4 degrees orally. The abdomen was board-like with rigidity and extremely tender on palpation. It was necessary to give him one-quarter grain of morphin before he could be removed to the hospital.

Radiographs taken soon after admission to the hospital showed a small bubble of air under the left dome of the diaphragm (taken with the patient in erect position).

It was difficult to obtain a very detailed history as a satisfactory interpreter was not to be had. Apparently the patient had had some stomach trouble of an indefinite nature for a long time. Two days previous to this acute illness a sharp pain occurred in the upper part of his abdomen and lower right side. This was aggravated by lying down. He had several such attacks of severe pain with sweats, but was able to continue work in the lettuce fields until 10 a. m. of June 27, when he had to stop because of a severe abdominal pain. He applied hot packs, but by 2 p. m. the pain became so severe that medical attention was sought. There was no vomiting or nausea and no fever that he was aware of.

His past history was negative as far as could be ascertained. He had always enjoyed good health until the above stomach distress began. He drank heavily and was off work for two months following one of these orgies.

A diagnosis of a ruptured gastric ulcer was made and immediate surgery advised. This was refused, so the usual medical treatment was instituted. That evening his temperature rose to 100 degrees. No further doses of morphin were needed for pain until early next morning. The pain at this time was mostly confined to the upper abdomen. Pain was easily controlled by small doses. On the second day his fever ranged from 99.6 to 101.2 degrees. The pulse remained good. On the third day there was tenderness in the lower right quadrant with rebound tenderness, and less distress in the upper abdomen. The patient, however, did not either look or feel bad. Abdominal distention was only very slight. The white blood count reached 24,000. On the fourth day he complained of pain in his chest. A few crackles could be heard in the lower left base, laterally. His temperature ranged from 98.4 to 99.2 degrees. On the next day he felt fine and there was only a faint tenderness in his abdomen. From now on he progressed very favorably, complaining only occasionally of a slight distress near the lower left sternal margin. In order to avoid expense he was discharged from the hospital on July 5, to report to the office every few days.

On July 12 he complained of a pleurisy-like pain in the left shoulder and lower left costal region. No râles could be heard in the chest and his temperature remained normal. Three days later he came to the office feeling very ill and with pain in the left lower chest. He was weak and perspiring freely. His temperature was 102.2 degrees. There was dullness in the lower half of the chest, with absent breath sounds. He was sent to the hospital, where an exploratory puncture was made in the tenth interspace, posterior axillary line. The needle was felt to penetrate more than pleura. Thick, yellow-green pus was aspirated.

On the following day he was taken to surgery. A preliminary exploration with the needle gave only straw-colored fluid. We now felt certain that the pus had been obtained after puncturing the diaphragm, and that the fluid was confined to the pleural cavity. A section of the tenth rib was resected, and further exploration with the needle through the diaphragm located pus. The wound was packed with gauze so as to stimulate adhesions and thereby wall off the pleural cavity before attempting to drain the abscess. This was done two days later. The infection was found to be well walled off and could be freely opened and drained through the diaphragm. Two rubber tube drains were inserted. Postoperative recovery was uneventful except for the development of a lung fistula, apparently due to pressure from one of the tubes. This closed spontaneously in two weeks.

Radiographs and fluoroscopic examination of the chest and stomach did not reveal any pathology on August 16. The patient was discharged in excellent condition.

COMMENT

Clinically this case fits in with the "forme fruste" type of perforated gastric ulcer as described by H. A. Singer and R. T. Vaughan. There were several days of prodromal symptoms: pain and epigastric tenderness. The pain of rupture was not quite as excruciating and the shock not as great as the classical form. The presence of air under the diaphragm offered our most definite diagnostic sign. The initial symptoms subsided rapidly. At no time was abdominal tympanites marked.

If our first exploratory puncture of the chest had not located the pus on first trial, but the pleural effusion instead, valuable time might have been lost in taking the proper surgical steps. Fortunately the pleura was not infected by withdrawal of the needle. The value of the two-stage operation in order to avoid infecting the pleural cavity is self-evident.

We feel that the end-result is most gratifying, as verified by radiographic evidence as well as clinically. The fact that no gastric lesion was demonstrated radiographically was not surprising, as it has been demonstrated by others that ulcerative lesions have healed completely following rupture.

406 Main Street.

A LARGE SUBSTERNAL ADENOMATOUS GOITER

By FRED B. MOOR, M. D.
Loma Linda

REPORT OF CASE

HISTORY.—Mrs. M. S. B., age sixty-seven, a widow, entered Loma Linda Sanitarium on September 2, 1931, complaining of a small right-sided swelling in her neck and a chronic nonproductive cough.

The patient had been exceptionally well all her life. The swelling had been noticed for about one year, but had given her little concern. In December, 1930, she suffered an attack of influenza following which she noticed a chronic nonproductive cough which remained with her continuously until her admission to the sanitarium. Recently she had had two or three attacks of choking and dyspnea. She fatigued easily and had occasional attacks of palpitation. She had lost six pounds in weight in the preceding two months.

The patient began to menstruate at the age of eleven and continued to the age of fifty-eight. Her periods were profuse and painful with an interval of twenty-eight days and a duration of seven days. She had two full-term normal pregnancies.

Physical Examination.—In general appearance the patient was an ambulatory elderly woman, somewhat plethoric, slightly cyanotic, and exhibited a brassy cough and some dyspnea even when at rest.

Head and Neck.—There was a definite exophthalmus with positive Stellwag and Von Graefe signs. The tonsils were large and inflamed, but no pus could be expressed. Laryngoscopic examination showed some atrophy of the left vocal cord and, although it was not fixed, its movement was not as great as that of the right cord.

The right lobe of the thyroid gland was considerably enlarged and rather nodular although not firm. The enlargement was continuous down behind the right clavicle. There was no apparent enlargement of the left lobe of the gland. The patient's neck was very short, rendering palpation difficult.

Chest.—The area of cardiac dullness was moderately enlarged to the left and was continuous with an area of dullness about 12 centimeters wide, extending to the upper margin of the sternum. There were no unusual sounds on auscultation over this area. There were a few moist râles in the bases of the lungs. The heart sounds were of fair quality, sometimes perfectly regular and at other times beating in triplets. There were no murmurs. The blood pressure on the right arm was 170 systolic and 70 diastolic, and on the left arm was 180 systolic and 80 diastolic. The pulse rate was 88 to 100 per minute.

Abdomen, Pelvis, Rectum, and Extremities.—Nothing significant revealed.

Laboratory Findings.—As regards basal metabolism, two tests, six days apart, gave readings of plus 17 per cent and plus 18 per cent, respectively.

Roentgen Examination.—Roentgenograms and fluoroscopic examination revealed a large nonpulsating shadow, continuous with the heart shadow, completely filling the anterior mediastinum.

Wassermann and Kahn Tests.—These were both negative.

Blood Counts.—The red cells and hemoglobin were normal. There were 4,500 white cells per cubic millimeter, with 56 per cent lymphocytes, 10 per cent transitionals, 29 per cent neutrophils, and 5 per cent eosinophils.

Blood Chemistry.—This included nonprotein nitrogen, creatinin, and sugar, which were all normal.

Urine and Stool Examinations.—These revealed nothing abnormal.

Treatment.—Left lobectomy was performed by Dr. George W. Crile at the Cleveland Clinic Hospital on September 28, 1931. The patient died the following day, when the pulse became weak and rapid and the blood pressure dropped. A blood transfusion was of temporary benefit.

Fig. 1.—Anteroposterior roentgenogram of the chest in the case of Mrs. M. S. B. Oblique picture shows the anterior mediasttinum completely filled.

Pathologic Report.—This is a summary of a complete and comprehensive report kindly furnished by Doctor Crile:

"The left lobe of the gland removed at the operation weighed 190 grams, and was composed of multiple, completely encapsulated adenomata of varying size. There was very little normal thyroid tissue left.

"At necropsy the right lobe of the gland was found to measure 15 x 6 x 7 centimeters, and to weigh 310 grams. It was nodular and had many firm scarred areas. On section this lobe showed many adenomata containing colloid material, some showing recent hemorrhage.

COMMENT

The complete pathologic diagnosis follows:

1. Colloid goiter with diffuse adenomatous change.
2. Hemorrhage, postoperative, cervical, and mediastinal.
3. Hypertrophy and dilatation, heart.
4. Hydrohemothorax, bilateral.
5. Congestion, lungs and spleen.
6. Persistent thymus.
7. Fibromyoma, uterus.

Loma Linda Sanitarium and Hospital.

Venereal Disease Control Is Important.—The American Social Hygiene Association, of which Dr. William F. Snow, former secretary of the California State Board of Health, is general director, has called attention, through the National Social Work Council, to the importance of venereal disease control at the present time. The problem of treatment for venereal disease patients is becoming acute. More and more infected persons unable to pay for medical care and unable to obtain free care because the clinics are now so overcrowded are forced to discontinue treatment. Left without medical supervision, they are likely to become sources of infection to others in the community and, furthermore, they are almost certain, themselves, to lose whatever chances of cure they may now have. It is believed that the public, generally, is not aware of the present situation that exists throughout the country.

BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An Open Forum for brief discussions of the workaday problems of the bedside doctor. Suggestions of subjects for discussions invited.

IMPETIGO OF THE NEWBORN

SAMUEL HANSON, M. D., (Medico-Dental Building, Stockton).—Impetigo of the newborn is an acute contagious disease of the skin characterized by vesicles and bullae on an erythematous base. The blebs vary in size from a few millimeters to a centimeter or more in diameter. The covering is very thin—of tissue paper thinness; the surface is flaccid and puckered, except in the very early stages of development. The contents of the bullae are thin straw colored or serous. The typical lesion is decidedly vesicular rather than pustular. The red areola which encircles the vesicles is a very constant accompaniment; it is most pronounced in the immediate vicinity of the vesicle and fades away imperceptibly in the surrounding healthy skin. When the vesicle bursts a raw oozing surface is left with thin shreds of epidermis attached at the periphery, and in places undermined by the serous exudate. There is very little tendency to crust formation. The exposed base of the ruptured vesicle is very similar to the denuded surface of a second degree burn. Lesions in all stages of development are present in any one area. The surfaces of the body usually involved are those that are covered and subjected to moisture, such as the diaper area, and the deep folds of the skin, as in the neck. Usually there is little or no fever, and only slight evidence of a systemic reaction.

In the severe forms of the disease (Ritter's Disease) huge bullae develop which quickly become confluent, and on bursting leave extensive raw surfaces. There is a marked constitutional reaction, with fever, vomiting, and diarrhea; and later dehydration, and evidences of a profound toxemia.

One other diagnostic feature of the disease is its extreme contagiousness. The tendency to transmission is so great that unusually strict isolation precautions must be instituted to eradicate an epidemic from a hospital nursery. With the exception of erysipelas, impetigo is the only acute highly contagious skin disease of the newborn.

From the above description it is obvious that impetigo of the newborn is clinically very different from the same condition in the school child. In the latter the disease is only slightly contagious, and is characterized by thick oozing crusts which are usually located on the face, scalp and extremities.

In the differential diagnosis the pustular form of miliaria and the bullous type of syphiloderm are practically the only conditions to be considered. Bullous eruptions due to iodides, bullous erythema multiforme, and epidermolysis bullosa are also mentioned in the differential diagnosis by some writers, but these dermatoses are exceedingly rare in the newborn.

In a consideration of pustular miliaria it is to be noted that the individual lesions are essentially pustules and not vesicles. The covering of the bleb is thick and tense, and there is no red areola. The lesions are not particularly limited to the diaper area but are as commonly to be found on the trunk, and even more commonly on the face. The infection is of low virulence and is not associated with any constitutional reactions. It is not contagious.

The lesions of bullous syphiloderm in some respects simulate very closely those of impetigo. They are usually, however, larger, their covering is thicker, their contents are semi-purulent from the beginning; and there is no red areola. They are distributed most commonly on the palms and soles. There are usually other evidences of luetic infection such as rhagades, snuffles, mucous patches, enlarged liver or spleen or a positive Wassermann reaction. Evidences of luetic infection in the mother may also be obtainable.

In conclusion it is well to remember that impetigo is a dangerous form of sepsis in a nursery or in close proximity to a delivery room. Hence, the obstetrician as well as the pediatrician must ever be on the alert for its early recognition. The physician will best serve the interests of his patients and his hospital if he will not hesitate in making at least a tentative diagnosis of impetigo in every instance of a vesicular or bullous eruption in the newborn, particularly if the covering of the lesions is thin and puckered, and a red areola is present.

* * *

L. F. X. WILHELM, M. D. (1680 North Vine Street, Hollywood, Los Angeles).—Periodic epidemics of impetigo contagiosa neonatorum, probably the most common dermatitis of the newborn, in recent years, seem to be more frequent in hospitals throughout the country. When such an outbreak occurs in a given hospital, it requires extreme diligence and care, and close coöperation on the part of nursing staff and attending staff to control the epidemic. Therefore, our efforts should be directed toward preventing, as far as possible, the spread of impetigo, should one case appear in the nursery.

The prognosis in a simple impetigo is usually good, especially if treatment is instituted as soon as possible after the first bullae appear. In the dermatitis exfoliativa neonatorum of Ritter, which Tamm and Gelpke consider a malignant form of impetigo contagiosa, the mortality is very high. In

simple impetigo, there are isolated bullae covering a greater or lesser extent of the body, while in the malignant form, the infection causes a more or less complete exfoliation of the skin of the entire body. The skin of the hands and feet are shed like a glove, in much the same manner as in scarlatina. The constitutional reaction of the infant is much more profound in Ritter's dermatitis exfoliativa neonatorum.

On account of the tendency of this disease to become epidemic, our efforts must be especially directed to its prevention. Orville R. Chadwell of Boston recently reported on his success in controlling this dermatitis in the New England states. Immediate isolation of infant and mother should follow the discovery of a bleb of impetigo. Chadwell found that they were able to prevent epidemics by the following procedure: Soap and water was used only once while the infant was in the hospital, and that was used to remove the vernix and blood immediately after delivery. Then the entire surface of the body was annointed vigorously with a five per cent ammoniated mercury ointment, care being taken to rub the ointment in, particularly in the axillae and groins. The face and scalp were treated with equal care. The subsequent daily care of the skin consisted of a complete and vigorous rubbing with sterile cottonseed oil. If any infant was found with a bleb it was immediately isolated, and treated with a three per cent ammoniated mercury ointment for three or four days. Using these methods, some of the New England hospitals have prevented epidemics of impetigo for three and more years. I believe a great part of the success of the above technique has been due to avoiding irritation of the skin incident to routine bathing with soap and water. We know that impetigo is prone to develop even in a microscopic abrasion.

Treatment of the disease varies. Some prefer a dry treatment consisting of swabbing the bases of the opened lesions with a five per cent solution of silver nitrate followed by the free application of Taylor's dusting powder (which contains mercurous chloride, three parts; talcum, two parts; and zinc oxide, one part).

I prefer the use of an ammoniated mercury ointment, two to five per cent, applied to the lesions once or twice daily after all the vesicles have been opened and all crusts have been removed with sterile cottonseed oil. Sub-erythema doses of ultraviolet ray and small fractional doses of x-ray not to exceed one-eighth skin unit (MacKee) are very useful in promoting a more rapid involution of the lesions. Gentian violet has found great favor, especially among the pediatricians. A two to four per cent sulphur ointment often proves of great value in stubborn cases.

In conclusion it is well to emphasize once more the desirability of preventing the spread of the infection by observing careful aseptic technique in handling the newborn infants, and by strictly isolating infant and mother, should even one suspicious bleb appear.

J. Carl Cummings, M. D. (202 Professional Building, Glendale).—The primary lesion in impetigo contagiosa is the characteristic pustule. This is, at first, a small but rapidly growing purulent vesicle surrounded by a small areola of inflammation. The pustules rupture, then become dry and covered with light yellow or brownish crusts. On account of the contagiousness of the process, the lesions of impetigo soon become confluent.

On the face and around the mouth and nose they form wreath-like figures, on the scalp a dense encrusted mass. As a result of scratching the pyogenic organisms are carried to other parts of the body and new crops of the pustules appear on the hands, arms, legs and trunk.

We rarely ever see this infection in the intrascapular space as the child cannot reach it with its finger nails.

It is a remarkable fact, that in spite of the demonstrated contagiousness of impetigo, and all children having the same chance of infection, that only a certain group of them become infected. There is a possibility that the germs of impetigo can invade only the skins which react to the irritation of the infected organism by some local inflammation, to which reaction some individuals are especially and naturally predisposed.

The pyogenic cocci thrive in the products of this inflammatory process and as a result we find numerous pustules.

If the impetigo appears as an independent primary affection, the skin around the pustule shows very little change, sometimes the round crusts have the appearance of being "stuck on the skin."

In secondary impetigo an entirely different condition is found which often results either from scratching or because the skin is soiled from a previous infection such as eczema, urticaria, or strophulus.

An odd form of "impetigo contagiosa" is the ordinary ecthyma, which in contrast with the condition above described, seems to arise from the deeper layers of the skin. A hard, tensely infilterated inflammatory nodule of a bright red color appears on the skin, a pustule develops from this nodule and usually passes through the same stages as an ordinary impetigo.

The pustules of ecthyma show no tendency to group, but are always discrete. They are most frequently seen on the extensor surfaces of the lower extremities and on the nates. This form of eruption is most frequently seen following scabies, and here scratching causes scars which persist much longer than the pale red spots following impetigo.

My observation of babies infected with impetigo during the first week of birth, is that they are usually well covered with vesicles at the time of onset of the primary affection.

I have seen more patients in institutions than I have in homes.

Regardless of complete isolation of newborn babies, it is a fact that the newborn are very susceptible to impetigo contagiosa.

CONCLUSIONS

1. Impetigo is characterized by the formation of discrete vesicular pustules.

2. Occurs most frequently upon the hands and face.

3. Patients are usually seen in groups affecting many babies in institutions.

4. The vesicles are usually one-fourth to one-half inch in diameter and are flaccid, never distended. Later the contents become slightly yellowish, then rupture and dry, forming thick yellow crusts, which have the appearance of being "stuck on," the surrounding skin being healthy. After the crusts fall off, a small red patch remains, which slowly fades.

5. The favorite seats of the eruption are the face, hands, neck, feet, legs, forearms and scalp.

6. The eruption is rarely seen on the abdomen and almost never upon the back.

7. There may be only half a dozen vesicular pustules, or from thirty to forty may be present.

8. Itching is never a prominent symptom.

Puritanism, Lack of Play, Linked with Crime, Vice.—Puritanism, leisure, and lack of normal fun and enjoyment are three factors definitely linked with vice and crime, Dr. Herman Adler, professor of psychiatry in the University of California, said today in the course of a popular lecture on "Psychiatry and Crime," delivered at the Stanford University Medical School.

"In sex, alcohol and drugs, and gambling, factors leading to vice and crime," he said, "the common denominator is restlessness and discontent caused by the damming back of natural fundamental impulses.

"The spirit of adventure which is represented by gambling is a safe one but it cannot be safely indulged in unless it is directed toward noncriminal goals. Gang activities do not furnish the only possible adventures today.

"Anything legitimate which counteracts in the individual the feeling that he is shut out and solitary, is desirable, and helps in preventing vicious demoralization. Group adventures, such as experiments in barter, are being worked out today."

Good times do not spell danger, the California psychiatrist, and formerly director, Boston Psychopathic Hospital, and professor of psychiatry in Harvard University, emphasized. It is the duty of public officials to make possible and organize such good times, the healthy use of leisure, he declared.

Fun and play are especially desirable right now, he said. Having a good time is much more desirable for the unemployed than to allow them to sit at home in solemn dejection or to wander about aimlessly in search for jobs which do not exist, he emphasized.

Drawing on his experiences as state criminologist for Illinois, and director, Institute of Juvenile Research of Chicago, the California psychiatrist pointed out that applied psychiatry can lend a helping hand in the search for safe outlets for three main human interests, indulgence in alcohol and drugs, gambling and vice.

"In the changing economic order of things," Dr. Adler said, "it is apparent that man is going to be faced with increasingly great amounts of time. Two groups will make adjustments without difficulty. The mentally low grade man will accept the situation with stolidity. The superior man, the artist, the genius, because of his great gifts, will escape, through his burning interests, the boredoom of undirected activity.

"Between these two groups, however, is the great bulk of humanity, which is neither so suggestible as to follow blindly, nor so superior as to be able to ignore lack of environmental compulsion. Individuals in this group are going to be at loose ends. As amount of leisure increases, boredoom and frustration can be expected to increase."

Physical or environmental factors, on which criminal behavior is based, were given priority by Professor Adler over formerly accepted causes such as mental deficiency, insanity and the theory of the "born criminal." Just as was done in the army, during the World War, he said, psychiatry could now function in the identification of the dangerous deviates from safe behavior, and assist man to live a "balanced" life.—*University of California Clip Sheet.*

Identical Twins More Alike Than Heredity Implies.—Identical twins are not only born with greater similarities than ordinary brothers and sisters, but they tend to become more alike in youth because of the treatment accorded them by relatives and other people with whom they come in contact.

This fact is pointed out by Professor H. E. Jones and Paul T. Wilson of the University of California Institute of Child Welfare in a report to the *Journal of Experimental Education* on a study of twins just completed by them in Berkeley.

Concerning this study, Professor Jones says: "It is well known that identical twins are more similar than fraternal twins in physical appearance, height and other body measurements, intelligence and scholarship. Some investigators have thought that this greater similarity of identical twins is due wholly to heredity, and that through comparing identicals and fraternals it is possible to measure the effect of heredity.

"The study which we have just reported was made on the hypothesis that the greater similarity of identicals may in some traits be due to a more similar environment; that they are more likely to be treated alike, and to have similar reputations, resulting in their being brought up under traditions which emphasize and tend to maintain their similarity. A test of this was made by comparing forty pairs of identical twins with forty pairs of fraternals of the same sex with regard to differences in such traits as sociability, irratability, self-assertion, leadership, impulsiveness, etc. It was found that on certain traits, such as irritability and impulsiveness, members of their families reported differences quite frequently for both fraternal and identical twins, but that on traits such as sociability and imaginativeness, fewer differences were observed. It was also found that the actual number of differences was in most traits smaller among identical twins.

"It was concluded that identical twins have much more similar reputations as to personality traits, than fraternal twins; that this similarity extends to a very wide range of traits, and that it applies very unequally to different traits. These facts suggest that not merely the biological heredity but also the social environment is more similar in the case of identicals, and that this must be taken into account in the use of the twin method in studies of heredity and environment."—*University of California Clip Sheet.*

The Irish Hospitals and Sweepstakes.—The success of the Irish hospitals in financing themselves by taking advantage of the gambling spirit of the world is so great that, since the special act passed by the dail in 1930, claims by forty-eight hospitals for aid amounting to $47,000,000 have been made and $32,000,000 has been awarded. Receipts from previous sweepstakes funds amount to $8,800,000. It is stated that $14,300,000 was awarded for endowment purposes, $15,700,000 for building works, site, mechanical plant and fees, $1,320,000 for repayment of loans, and $760,000 for medical, surgical and pathologic apparatus. It is announced that more hospitals will participate in subsequent sweepstakes. The claims are much in excess of the awards, some of which are considered insufficient, and in some cases amended claims are being prepared. Seven sweepstakes have been arranged to take place before July, 1934, when the special act expires.—London *News Letter (Journal of the American Medical Association).*

California and Western Medicine

Owned and Published by the

CALIFORNIA MEDICAL ASSOCIATION

Official Organ of the California and Nevada Medical Associations

FOUR FIFTY SUTTER, ROOM 2004, SAN FRANCISCO

Telephone Douglas 0062

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Subscription prices, $5.00 ($6.00 for foreign countries); single copies, 50 cents.

Volumes begin with the first of January and the first of July. Subscriptions may commence at any time.

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Leaflet Regarding Rules of Publication.—California and Western Medicine has prepared a leaflet explaining its rules regarding publication. This leaflet gives suggestions on the preparation of manuscripts and of illustrations. It is suggested that contributors to this journal write to its office requesting a copy of this leaflet.

EDITORIALS*

C. M. A. ANNUAL SESSION—DEL MONTE, APRIL 24-27

An Annual Session Program Presents a Four-Day Postgraduate Course.—The 1933 annual session is held in a year when general economic conditions are such that few physicians are in the mood to spend money if the spending can be avoided. This financial stringency with which practically all physicians have a first-hand knowledge, is partly due to the fact that many lay citizens are refraining from calling in medical aid unless absolutely needed; and of citizens who do go to physicians, many, indeed perhaps the majority, are themselves in such straitened financial circumstances that they are not in position to pay for the professional services rendered. Inasmuch as nowadays less medical service is being called for, the conclusion may be drawn that most medical men have a bit more leisure time than formerly. That being the case, would it not be wise to take advantage of the brief but excellent postgraduate course which is offered in the four-day annual session of the California Medical Association?

* Editorials on subjects of scientific and clinical interest, contributed by members of the California Medical Association, are printed in the Editorial Comments column, which follows.

Expense of Attendance Not Necessarily Heavy. The expense of attendance need not be overgreat. If railroad fare and headquarters hotel rates seem a bit appalling, why not join with and share expenses with two or three colleagues and motor to Monterey County, make your convention living headquarters at one of the hotels at Del Monte, Monterey, Carmel or Pacific Grove, attend and profit from the meetings and at the same time have the joy that goes with an outing? A list of hotels with rates is printed in this issue. (See page 286.)

* * *

The General and Scientific Programs.—Inspection of the program provided for this annual session, and which is printed in this issue of CALIFORNIA AND WESTERN MEDICINE, shows that it measures up to the high standards of recent years.

At the general sessions will be heard notable speakers from the East who will discuss freely some of the medical economic problems which have been so much in the limelight in the last five years. Our fellow Californian, Dr. Ray Lyman Wilbur, chairman of the Committee on the Costs of Medical Care, and Guest Speakers Dr. Arthur C. Christie of Washington, D. C., a signer of the Minority Report, and Dr. R. G. Leland, director of the Bureau of Medical Economics of the American Medical Association, will present viewpoints based on peculiarly intimate and first-hand knowledge of the subjects under discussion. Those presentations on the opening days will lead to much exchange of opinion between members who attend, and from such discussions good is bound to come. For list of guest speakers and program of general sessions, see page 284.

The scientific programs are likewise of high order and of broad scope and diversity, both as regards guest speakers from other states and as pertains to Californians who are on the section programs. For section programs, see page 290.

In this April issue, the complete program of the Del Monte annual session is printed. You owe it to yourself and your profession to scan it carefully. It is hoped that the various programs will appeal to you. Attention is also called to the reports of officers and committees as presented in this issue in the *Pre-Convention Bulletin.*

All formality and entertainment will be dispensed with at this year's session. The California Medical Association meets to give serious attention to the important problems which face it. Through contact with fellow physicians, those who attend are certain to receive inspiration that will help them to go back to local tasks with courageous hearts and clear minds. Every California Medical Association member who can arrange his practice to attend this year's 1933 annual session should do so. In spite of the hard times, it can and should be made one of the largest, best and most valuable sessions that the California Medical Association has ever held.

THE LEGISLATIVE SESSION CONTINUES

Progress Report Somewhat Meager in Details. The California Legislature is still in session. In past legislative years, adjournment was apt to take place in April. In the present fiftieth session, with the massive amount of economic readjustment legislation to which consideration and time must be given, it is quite likely that the legislature may still be at work in June.

It is not possible at this writing to give much authoritative information concerning the many public health measures which were listed on page 221 of the March CALIFORNIA AND WESTERN MEDICINE. It can be stated, however, that the officers of the Association and the Committees on Public Policy and Legislation of the State Association and county societies have been actively at work and probably will be in position to render a good progress report at the Del Monte annual session on April 24-27. That report will give information concerning the work thus far accomplished and will enable members of the California Medical Association to visualize the legislative situation. It may be of interest to California Medical Association members to know that, as regards some of the proposed statutes, such as the admission of nonindigents to county hospitals, the reception of the representatives of the profession at the committee hearings was most kindly.

The manner in which county societies and members can be of most efficient service in these legislative matters was outlined in the comments made on pages 183-186 of the March number of CALIFORNIA AND WESTERN MEDICINE. When the call for action is made, it is hoped that all who have definite responsibilities or who are in position to be of special aid will promptly respond.

THE SOUTHERN CALIFORNIA EARTHQUAKE

The San Francisco Earthquake of April, 1906. Recent numbers of CALIFORNIA AND WESTERN MEDICINE, in the "Twenty-Five Years Ago" column, contained several references to the San Francisco earthquake and fire, the excerpts being from the official journal of the year 1906. The California Medical Association (which at that time had the name "Medical Society of the State of California") on the day before the earthquake, under the presidency of Dr. Robert F. Rooney, opened its 1906 annual session in San Francisco. The first day's meeting was held that year in the old Y. M. C. A. building on Van Ness Avenue. The only other meeting of the Association of that session was held with two members present, one being the late Doctor Rooney (who died at the age of 90, on December 21, 1932, and whose obituary was printed in the February CALIFORNIA AND WESTERN MEDICINE) and the other being the then secretary, the late Philip Mills Jones (founder of CALIFORNIA AND WESTERN MEDICINE) who met to declare an adjourned meeting until the next year. That was how Doctor Rooney came to be president for two succeeding years, 1906 and 1907.

A Southern California Over-optimism.—The writer was one of the California Medical Association members in attendance at that 1906 San Francisco annual session. He was impressed not so much by the great fire as by the great menace to human life in earthquake zones, which could result from poor construction and fancy and overhanging cornices and ornamentation of the walls facing streets. In the *Southern California Practitioner,* of which he was the then editor, he expressed himself on this point as follows:

". . . These new amendments to the building laws of Los Angeles have for their purpose the prevention of destruction of property and life by either earthquake or fire. The amendments have to do especially with the height, thickness and general construction and material of walls, and particular attention is given to the proper anchorage of chimneys, fire and other walls and partitions that rise above the surface of upper stories.

"The suggestions and proposed amendments have been duly ratified by the Council, and what little danger Los Angeles may have chanced to have been in in the past, from its supposed location in a so-called earthquake zone, bids fair now to be entirely minimized or neutralized.

"It may therefore be said that Los Angeles has profited by the misfortune of San Francisco in that the latter city's awful experience has led to the adoption of building requirements in Los Angeles which ordinarily would have had little or no chance of passage."

In the light of what happened to many buildings in the recent earthquake which occurred in the Los Angeles-Long Beach area, the editor realizes that his then editorial comments were somewhat over-optimistic. For the building ordinances referred to, while good, were not as effective as was prophesied.

* * *

Adequate State Building Laws Needed.—All serious-minded Californians should be deeply grateful that the San Francisco and Long Beach-Los Angeles earthquakes occurred at hours when a minimum instead of a maximum number of citizens were on the streets. For at other hours of the day there could have been a death loss in each district that might have been ten, twenty, or thirty times as great had either temblor taken place at about the noonday hour or other time when schools and streets were crowded. The increased death and injury loss under such conditions would have resulted in major part from poorly constructed front walls, from which poorly attached stone and other material would have fallen on citizens who were afoot.

In the recent Southern California earthquake, the modern, well constructed large buildings stood the temblors quite well. But in places where local building ordinances were loosely drawn, or where political or other influences had permitted the utilization of cheaper material such as mortar, and of construction that did not comply with the building laws, the damage to even larger buildings such as schools was very evident, and could have been responsible for loss of life difficult to estimate.

That our state and cities in both instances were spared a massive loss of life should spur us on in our determination that from now on, building con-

struction in California shall be earthquake-proof in so far as it is humanly possible to make it so. Physicians, because of their profession, look upon themselves as conservators of human health and life. In these matters of earthquake-proof building laws, physicians have a double responsibility—as medical men and as citizens—and should give these proposed laws their fullest support.

In the recent Southern California earthquake it was gratifying to read the accounts of the splendid manner in which the physicians in the districts involved met the grave responsibilities which the temblors threw upon them. Having done their part with credit to themselves in that emergency, they should be equally energetic and efficient in support of laws that would prevent unnecessary loss of life in the future.

Attending Staff Services as Listed in Hospital Reports. Dr. S. S. Goldwater in a letter to the *Journal of the American Medical Association,* Vol. 99, No. 18, writes as follows: Although the annual reports of hospitals are valuable sources of information concerning certain hospital activities, they are strangely silent in relation to one of the major aspects of hospital service, namely, the gratuitous service of physicians which is bound up with ordinary hospital practice. Those who have been identified with hospital administration and have shared in the preparation of hospital reports know that the omission is due to thoughtlessness and not to any desire to conceal a vital fact in medico-social economics. Nevertheless, it is high time for hospitals to mend their ways. . . .

I can perhaps best bring out the importance of the matter by an attempt to compute roughly but conservatively the value of the free service of the imaginary hospital from whose report I have just borrowed a typical record of free service. It was assumed that the hospital in question admitted 1,000 free patients in the course of a year. Probably three-fifths, certainly one-half of this number, would be surgical cases and we should not be far out of the way if we assumed that out of 1,000 patients, 500 required major surgical operations. If we put the money value of each major surgical procedure at $100, the surgical staff will have contributed $50,000 worth of free surgical work. We could hardly be accused of exaggerating the value of medical service rendered in the wards if we said that the work of the staff, amounting to 12,000 days of free care of acutely sick patients, was worth $3 a day, or $36,000 for the year; nor would it be extravagant to assign to each of the 20,000 consultations in the outpatient department a value of $1 a consultation, or $20,000 for the year. Now let us add up: (1) surgical work, $50,000; (2) ward service, $36,000; (3) dispensary service, $20,000. The total is $106,000, a moderate estimate of the value of free professional service in a hospital whose parallel cash outlay amounted to only $60,000. I am, of course, aware of the fact that $60,000 would not, in such a case, represent the total amount contributed by the community, since it covers current expenses only and does not take into account capital outlay, which logically must be included as an additional community contribution. But after analyzing the reports of numerous hospitals in the eastern part of the country, I am prepared to say that the money value of the free service given by the staff is in many cases at least equal to the cash contributions for all purposes which are made by the community. Moreover, whatever the relative value of these two intimately associated services may be, it is important that the facts should be disclosed by hospital reports, for without them the medical economist and the legislator must remain ignorant of knowledge which is indispensable to a proper understanding of social processes and public needs.

Whether the medical profession can afford to continue its service to hospitals without being paid for it directly (or paid for it at all) is a question that merits consideration by itself; here and there the voice of an individual or of a committee has been raised in protest, but, generally speaking, physicians thus far have eagerly sought opportunities for hospital service without pay. I hope I have shown (and it is scarcely a discovery) that the unpaid service of hospital staffs is a major element in hospital economics and that it is desirable that hospitals bring out the facts by a method of presentation to be agreed on between hospital boards and hospital staffs. A statement of free medical service in estimated dollar value, based on prevailing local rates, would probably be most readily understood by the lay public, but if an agreement cannot be reached as to a scale of money values, the work could readily be tabulated in terms of service units. In any event, the physician should be given his due!

The Number of Automobile Accidents in France.—The minister of the interior has published a report on the accidents caused in France by automobiles. The minister emphasized the shocking number of accidents, without taking account of the increasing number of cars in use and the more crowded conditions on the highways. If one takes account of these factors there has been, in a sense, a diminution of accidents. The statistics reveal much better conditions than in other countries. A survey of the accidents during the period 1924-1930 shows the following:

Years	Fatal Accidents	Total No. of Cars in Use	No. of Accidents per 100,000 Cars
1924	1,626	716,951	225
1925	2,089	868,225	240
1926	1,160	974,699	222
1927	2,379	1,208,847	197
1928	2,941	1,417,755	207
1929	3,717	1,701,680	218
1930	3,120	1,951,712	201

In England, last year, there were 6,696 deaths due to automobile accidents, and in the United States there were 33,600 deaths and 1,200,000 injuries. The record of France is a little lower than that of Germany. Nevertheless, the minister of the interior recommends greater severity in the examinations for drivers' licenses. The percentage of rejected applicants ranges at present between twenty and thirty, the rejections being based most frequently on an inadequate knowledge of the rules of the road. The question has been brought up again of the value of a physical examination of drivers in order to detect imperfections of eyesight or hearing, arterial sclerosis, cardiac lesions, and unstable emotions, which play an important part in most accidents in which women drivers are involved. A physical examination is already required of drivers of public vehicles, since the companies to which these belong wish to avoid having to pay too large amounts as damages, in case of accidents. A physical examination of drivers of private automobiles, while it appears desirable, has not appeared feasible, because of the immense number and the cost. A physical examination is, however, required of drivers who have been in an accident. It is thought that gradually a physical examination may be required of all new drivers by requiring them to present an insurance contract and then urging the insurance companies not to issue a contract to persons who fail to present a certificate showing a satisfactory medical examination. —Paris Letter, *Journal of the American Medical Association.*

Fungal Infection of Feet.—Henderson observed that, when shoes are left for from eight to sixty hours in a closed tin box containing a small dish of formaldehyd, the vapor effects sterilization even at room temperature. Leather absorbs considerable amounts of formaldehyd vapor, which it gives off again for many hours afterward. When shoes so treated during the night are worn during the day, a distinct amelioration or disappearance of infection of the skin may result after a time. Incidentally, the feet are also protected against reinfection from the shoes.—*Archives of Dermatology and Syphilology.*

EDITORIAL COMMENT

This department of California and Western Medicine presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to every member of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

Tropical Diseases in California.—California stands at the crossroads of Pacific Ocean commerce and passenger traffic. It is the Mecca for persons retired because of health or finances. It draws an enormous transient tourist population but at the same time geographic and climatic factors provide conditions favorable for the spread of many diseases generally supposed to be characteristic of, or limited to the tropics and sub-tropics. Insect vectors of disease are being found with increasing ease as attention is directed to these problems. Mosquitoes, biting flies and fleas have been incriminated. Mammalian and rodent reservoirs of disease have been discovered in appalling numbers, as in the case of relapsing fever, tularemia, typhus fever, plague and undulant fever. Human carriers of such diseases are known to be present and dangerous in amebiasis, bacillary dysentery and others.

Altogether, physicians are finding that California is abundantly supplied with tropical diseases and especially with potential reservoirs and means of transmission for them. Recognizing this situation and its portent for the future, the University of California has developed an original function of its Hooper Foundation for Medical Research into The Pacific Institute of Tropical Medicine to deal with just such present and impending problems.

But of greater immediate interest and more to the point is the discussion of the opportunity offered the university in the way of fields of investigation. Problems in medical investigation may be grouped roughly as general, that is, those common to all communities, or local, as those determined by some peculiar condition of climate or geographical location, local industries, or density and character of population and so forth. The geographical situation of San Francisco determines at least one of the problems which should, through its new foundation, immediately engage the attention of the University of California. The port of San Francisco, draining as it does the Orient and the Panama Canal, offers an opportunity for the study of tropical and unusual imported disease not open to any other city in the temperate zone. The intensive investigation of tropical diseases and the allied fields of protozoology and comparative pathology is sure to yield results of the greatest value to scientific medicine and will at the same time allow this university to assist the state in even greater extent than in the past, in the solution of problems concerning the health and welfare of its citizens. In this field alone the Hooper Foundation will undoubtedly take a prominent part, active and advisory in the affairs of the community.

The thesis of these remarks is well illustrated by the striking paper in this issue by Kofoid and Donat of the University of California on the prevalence and dangers of so-called kissing bugs in California.* Their demonstrations and conclusions are of great practical importance and should be familiar to every physician in California. The same may be said for the analogous report by Larsen and Johnstone on the potentialities of Simulium flies in California in relation to the filariel eye disease, onchocercosis, now prevalent in Guatemala and Mexico.

Timely prevention is vastly better than attempted treatment, especially in such diseases as South American trypanosomiasis and onchocercosis, for which there is no specific cure and no effective treatment. California's protection lies in the vigilance of her medical profession. Physicians must be informed as to these and similar tropical disease dangers and must be on the watch for their recognition.

George Williams Hooper Foundation,
University of California.

ALFRED C. REED and
KARL F. MEYER,
San Francisco.

III†

Pleoantigenic Bacteria.—The use of bacterial vaccines as specific diagnostic, prophylactic, and therapeutic agents is logical, provided one assumes that the antigenic properties of each vaccine are qualitatively identical with the essential reacting specificities in all types, stages, and phases of the corresponding natural infection.

The newer pleomorphic bacteriology challenges the truth of this assumption. Pure cultures of the typhoid bacillus, streptococcus, pneumococcus and tubercle bacillus, for example, have been reported to "dissociate," "mutate," or pass through "phases," in which not a single original morphological, tinctorial, or antigenic property is demonstrably retained. As many as twelve morphological and tinctorial variants of certain pure cultures are alleged which, on specific serological analyses, fall into at least three apparently distinct antigenic groups. Judged solely from these serological data, the three groups might be classed as the etiological factors of at least three widely different infectious diseases.

It is estimated that at least half of the typhoid vaccines of the last quarter-century were grown or prepared under conditions from which bacteri-

* See page 245.

† Part I of this series was printed in the February CALIFORNIA AND WESTERN MEDICINE; Part II in March, page 188.

ologists today would expect only "nonimmunizing phases." Future refinements in vaccination technique, therefore, may more than double the demonstrable value of numerous specific prophylactic agents.

Equally important antigenic "mutations," "variations" or "transformations" take place in the animal body. Injected into dogs and ferrets, for example, the filterable virus of canine distemper is reported to change or to be changed into two qualitatively distinct vaccination specificities.[1] Neither the canine nor the ferret splenic variant is an effective specific prophylactic vaccine with the other animal species. Antigenic differences have also been reported between staphylococci isolated from different organs at the same human autopsy. Under certain experimental conditions, pneumococci are "activated" in the animal body into wholly new type specificities.[2] Primary and tertiary antigenic phases of *T. pallidum* have been isolated from clinical cases.[3]

From present immunochemical data, specific test-tube vaccines and vaccines derived from lower animal species are purely empirical therapeutic gambles. The fact that a proposed vaccine will effectively immunize rabbits against multiple lethal doses of the corresponding test-tube culture does not influence the therapeutic uncertainty, unless supplemented by convincing evidence that all antihuman, mucous membrane, interstitial and septicemic phases of this infectious agent are qualitatively identical with the test-tube culture. There is not today a single pathogenic microörganism whose stability, lability and other pleoantigenic properties are known in sufficient detail to furnish such evidence.

Until such details are available, physicians must use all proposed specific vaccines with an open mind, equally prepared for clinical success and therapeutic failure. This does not apply, of course, to specific vaccines used for purely psychological effects or as convenient agents for the production of "nonspecific protein reactions."

Stanford University.

W. H. MANWARING,
Palo Alto.

School Health.—In these times of stress and universal unrest all public institutions are being carefully scrutinized as to the essential need for their activity. Therefore, we must discriminate carefully between those which serve a vital human need and those which do not. School health work requires no defense, as it has been accepted and approved by the civilized world for a century. It is the most important phase of our educational program. Without health supervision education cannot endure. In these days of economic strain school health supervision is more essential than ever.

As organized in Los Angeles, it provides for all school children a periodic health examination to the end that they may profit by the education they receive and in the course of which thousands of physical defects are discovered which would otherwise have remained undetected. This work is highly effective because it is conducted by physicians, dentists, nurses, and specially trained physical education teachers who have had years of special training in school health work; men and women who have devoted themselves to this specialty largely because of their intense interest in it. They have made a study of the normal child, and they are specially qualified to detect slight deviations from normal; they are more interested in preventing disease than in curing it.

Their service in preventing juvenile delinquency and crime, in correcting postural defects, in controlling the spread of contagion, and infectious skin diseases, in forestalling backwardness by placing glasses on defective eyes, preventing deafness, giving advice on malnutrition, and in scores of other ways keeping our school children as near fit as possible, cannot be measured in dollars and cents. The great majority of children would receive no medical supervision except in cases of acute illness were it not for the school physician's examination and the nurse's inspection.

Those children whose parents cannot pay a physician are taken care of at the Parent-Teacher Association's health centers and other clinics; those who are able to pay the physician consult him much oftener because of the school health worker's activities. Thousands of children are referred to the family doctor for the correction of previously undiscovered defects. It must be clearly understood that school health work is not curative medicine, but preventive medicine.

If this service were further curtailed it would be the most unfortunate policy a community could possibly adopt. It would set us back many years. The results in increased disabilities would persist into the coming generations. We see daily the children from other cities and towns where school health work is inadequate. These children often show the sad results of uncorrected defects; such cases are rare in children born in Los Angeles.

During the World War a large percentage of our youth were rejected because of uncorrected physical defects that should have been attended to in childhood. We should not permit a repetition of this terrible blunder. The birthright of our children must not be destroyed. As a measure of ultimate economy, proper child care must be given now even though other important activities must be sacrificed. Have we less foresight and less humanity than the ancient Greeks and Romans, who during their days of glory and physical perfection, in times good and bad, gave first place to the health supervision of their children, whom they considered more precious than gold or anything else in the structure of the state? In times of depression we must not relax our vigilance for the health of the future generations, for then we will be a long time paying for our folly, and we will also be responsible for untold suffering of our future citizens.

358 South Citrus Avenue.

SVEN LOKRANTZ, M. D.,
Los Angeles.

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1 Laidlaw, P. P., and Dunkin, G. W.: Jour. Comp. Path. and Therap., 41:1, 209, 1928.
2 Alloway, J. L.; Jour. Exper. Med. 55:91, 1932.
3 Artificial Neurotrophic Syphilis, J. A. M. A., 96:119, 1931.

PROGRAM

THE SIXTY-SECOND ANNUAL SESSION *of the* CALIFORNIA MEDICAL ASSOCIATION

TO BE HELD AT

HOTEL DEL MONTE, DEL MONTE

APRIL 24–27, 1933

OFFICERS AND COMMITTEES, 1933

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EDWARD M. PALLETTE, Los Angeles, Speaker of House of Delegates
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Los Angeles County

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Henry J. Ullmann, Santa Barbara (1934)
Kern, San Bernardino, San Luis Obispo, Santa Barbara, and Ventura Counties

Fourth District

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Fifth District

Alfred L. Phillips, Santa Cruz (1933)
Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz Counties

Sixth District

Karl L. Schaupp, San Francisco (1934)
San Francisco County

Seventh District

Oliver D. Hamlin, Oakland (1935)
Alameda and Contra Costa Counties

Eighth District

Robert A. Peers, Colfax (1933)
Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo, and Yuba Counties

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William H. Kiger, Los Angeles (1934)
Morton R. Gibbons, San Francisco (1935)
T. Henshaw Kelly, San Francisco (1933)
Junius B. Harris, Sacramento (1934)

DELEGATES AND ALTERNATES TO A. M. A.

Delegates		Alternates
Dudley Smith Oakland	(1932-1933)	LeRoy Brooks San Francisco
William Duffield Los Angeles	(1932-1933)	William H. Gilbert Los Angeles
*Fitch C. E. Mattison Pasadena	(1932-1933)	Fred B. Clarke Long Beach
C. A. Dukes Oakland	(1933-1934)	Harry H. Wilson Los Angeles
Carl R. Howson Los Angeles	(1933-1934)	*Charles D. Lockwood Pasadena
Junius B. Harris Sacramento	(1933-1934)	John H. Shephard San Jose
William R. Molony Sr. Los Angeles	(1933-1934)	John C. Ruddock Los Angeles

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Morton R. Gibbons....San Francisco
Karl L. Schaupp....San Francisco

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R. Manning Clarke (Chairman), Los Angeles....1934
Clifford Sweet, Oakland....1935

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Robert T. Legge (Chairman), Berkeley....1934
James F. Churchill, San Diego....1935
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Langley Porter, San Francisco....1934
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George D. Lyman, San Francisco....1934
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The Secretary....Ex officio
The Editor....Ex officio

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Karl L. Schaupp, San Francisco....1934
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Committee on Medical Defense

Fred R. DeLappe, Modesto....1933
Henry Snure, Sr. (Chairman), Los Angeles....1934
George G. Reinle, Oakland....1935

*Deceased.

(Continued on Page 282)

GUEST SPEAKERS AT THE SIXTY-SECOND ANNUAL SESSION CALIFORNIA MEDICAL ASSOCIATION

Speakers at First General Meeting

ARTHUR C. CHRISTIE
Washington, D. C.

R. G. LELAND
Director, Bureau of Medical Economics,
American Medical Association,
Chicago, Illinois

RAY LYMAN WILBUR
President of Stanford University
Chairman of the Committee on the Costs of Medical Care

GUEST SPEAKERS AT THE SIXTY-SECOND ANNUAL SESSION CALIFORNIA MEDICAL ASSOCIATION

Speakers at Third General Meeting

HARVEY B. STONE
Baltimore, Maryland

CYRUS C. STURGIS
Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan

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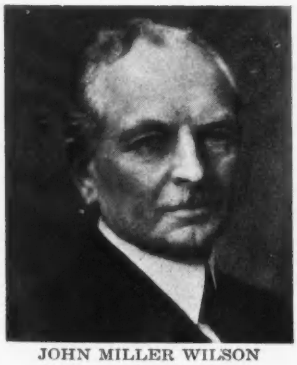
Chairman, Anesthesiology

LAURENCE TAUSSIG
Chairman, Dermatology and Syphilology

ISAAC H. JONES
Chairman, Eye, Ear, Nose, and Throat



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CHARLES J. LUNSFORD
Secretary, Dermatology and Syphilology

J. ROY JONES
Secretary, Eye, Ear, Nose, and Throat

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Secretary, General Surgery

WILLIAM S. KISKADDEN
Secretary, Industrial Medicine and Surgery

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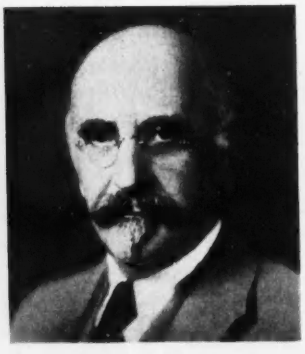
Chairman, Neuropsychiatry



E. M. LAZARD
Chairman, Obstetrics and Gynecology

FREDERICK PROESCHER
Chairman, Pathology and Bacteriology

SECTION OFFICERS

H. DOUGLAS EATON
Secretary, Neuropsychiatry

EMIL J. KRAHULIK
Secretary, Obstetrics and Gynecology

GEORGE D. MANER
Secretary, Pathology and Bacteriology

WILLIAM M. HAPP
Chairman, Pediatrics

HENRY SNURE
Chairman, Radiology

JAMES C. NEGLEY
Chairman, Urology

HENRY E. STAFFORD
Secretary, Pediatrics

ROBERT S. STONE
Secretary, Radiology

LEWIS MICHELSON
Secretary, Urology

OFFICERS AND COMMITTEES, 1933

(Continued from Page 277)

Committee on Medical Economics

Daniel Crosby, Oakland 1933
Lyell C. Kinney, San Diego 1934
John H. Graves (Chairman), San Francisco 1935

Committee on Medical Education and Medical Institutions

George G. Hunter, Los Angeles 1933
H. A. L. Ryfkogel, San Francisco 1934
George Dock (Chairman), Pasadena 1935

Committee on Membership and Organization

Jesse W. Barnes, Stockton 1933
LeRoy Brooks, San Francisco 1934
Harry H. Wilson (Chairman), Los Angeles 1935
The Secretary ..... Ex officio

Committee on Publications

Frederick F. Gundrum, Sacramento 1933
Percy T. Magan (Chairman), Los Angeles 1934
Ruggles A. Cushman, Talmage 1935
The Secretary ..... Ex officio
The Editor ..... Ex officio

Committee on Public Policy and Legislation

Fred R. Delappe, Modesto 1933
William Duffield, Los Angeles 1934
Junius B. Harris (Chairman), Sacramento 1935
The President ..... Ex officio
The President-Elect ..... Ex officio

Committee on Scientific Work

F. M. Pottenger, Monrovia 1933
Lemuel P. Adams, Oakland 1934
John Homer Woolsey, San Francisco 1935
Fred H. Kruse, Secretary of Section on General Medicine ..... Ex officio
E. Eric Larson, Secretary of Section on General Surgery ..... Ex officio
Emma W. Pope (Chairman) ..... Ex officio

Committee on Public Relations

The Committee on Public Relations consists of the chairmen of the following standing committees and of certain general officers of the Association, all serving ex officio. The chairman of the committee is Dr. Charles A. Dukes, the secretary is Dr. Emma W. Pope. The director of the Department of Public Relations is Dr. Walter M. Dickie.

Fred B. Clarke, Chairman, Committee on Health and Public Instruction.
John C. Ruddock, Chairman, Committee on Hospitals, Dispensaries, and Clinics.
Daniel Crosby, Chairman, Committee on Industrial Practice.
Harry H. Wilson, Chairman, Committee on Membership and Organization.
John H. Graves, Chairman, Committee on Medical Economics.
Junius B. Harris, Chairman, Committee on Public Policy and Legislation.
Charles A. Dukes, Chairman, Cancer Commission.
Joseph M. King, President of the California Medical Association.
George G. Reinle, President-Elect.
Emma W. Pope, Secretary-Treasurer.

Communications for the Public Relations Department should be addressed to the director, Dr. Walter M. Dickie, Room 2039, Four Fifty Sutter Street, San Francisco.

Cancer Commission

Harold Brunn, San Francisco 1933
Henry J. Ullmann, Santa Barbara 1933
Clarence G. Toland, Los Angeles 1933
Charles A. Dukes (Chairman), Oakland 1934
Lyell C. Kinney (Vice-Chairman), San Diego 1934
Alson R. Kilgore (Secretary), San Francisco 1934
William Ophüls, San Francisco 1935
Orville Meland (Secretary for Southern Section, Los Angeles 1935
A. Herman Zeiler, Los Angeles 1935

Communications for the Cancer Commission should be addressed to the secretary, A. R. Kilgore, M. D., Room 2039, 450 Sutter Street, San Francisco.

SPECIAL COMMITTEES

Special Committee on Clinical and Research Prizes

George Dock (Chairman), Pasadena 1933
Eugene S. Kilgore, San Francisco 1934
Arthur L. Bloomfield, San Francisco 1935

Each year the California Medical Association offers two prizes of $150 each, with certificates of award, for the two best papers on clinical and research subjects. Full information concerning the conditions laid down in these competitions may be had by addressing the Association secretary.

Committee on Arrangements—Del Monte Annual Session

William Gratiot (Chairman), Monterey.
Spencer Hoyt, Pacific Grove.
John A. Merrill, Monterey.
Alfred L. Phillips, Santa Cruz.
T. Henshaw Kelly, San Francisco.

REGISTRATION INFORMATION

Registration and Information.—The registration and information desk is located in the lobby, Hotel Del Monte. All persons attending the convention, whether members or not, are requested to register immediately on arrival. Beginning Monday, April 24, registration secretaries will be on duty daily from 9 a. m. until 5 p. m.

Programs and "Pre-Convention Bulletin."—The registration clerks will give to every member a copy of the program. Every delegate and alternate will also receive a copy of the "Pre-Convention Bulletin."

Membership Cards.—Every member in good standing in the California Medical Association has been issued an official membership card for 1933. Membership cards must be shown at the registration desk.

Guests and Visitors.—All guests and visitors are requested to register. All general meetings and scientific meetings are open to visitors and guests.

Badges.—Four kinds of badges will be issued by the registration bureau:

1. *Members.*—Only active, associate, retired or honorary members of the California Medical Association will be issued the usual membership badge. Members must show membership cards when they register.

2. *Guests.*—A guest badge will be issued to all fraternal delegates, visiting physicians, wives of members, and technical specialists who are attending the 1933 session.

3. *Delegates and Alternates.*—The usual official badge for each delegate and alternate is provided for this purpose, and will be issued only to one authorized to wear it.

4. *Officers.*—An official badge is provided for all officers and members of the Council.

Suggestions and Constructive Criticism.—The officers and committees have tried to do everything possible to make the session a success. Suggestions and constructive criticism calculated to make future sessions more useful will be welcomed by any of the officers. Complaints of whatever character should be promptly made to the registration desk, where they will receive attention.

DINNERS AND LUNCHEONS

See Bulletin Boards for Other Announcements

Official Dinners and Luncheons

President's Dinner.—Tuesday evening, 7:30 p. m., in main dining room, Hotel Del Monte. Entertainment in the auditorium follows the dinner.

State and County Officers' Luncheon.—All county officers, and officers, councilors and standing committeemen of the California Medical Association are invited to a luncheon on Tuesday, April 25, at 1 p. m., in the Copper Cup Room.

Committee on Scientific Work.—The Committee on Scientific Work will meet at luncheon on Wednesday, April 26, in the small dining room off the main dining hall.

Fraternity Gatherings.—The Nu Sigma Nu will hold a reception for members and their families at 6:30 p. m., one hour before the President's dinner. Room will be announced on registration blackboard. It will be good to see one another again.

MEMBERSHIP, 30th ANNUAL SESSION OF HOUSE OF DELEGATES

DELEGATES—EX-OFFICIO (21)

Joseph M. King, Los Angeles.....President
George G. Reinle, Oakland.....President-Elect
Emma W. Pope, San Francisco.....Secretary-Treasurer
Edward M. Pallette, Los Angeles.....
.....Speaker of the House of Delegates
John H. Graves, San Francisco.....
.....Vice-Speaker of the House of Delegates
George H. Kress, Los Angeles.....Editor
W. W. Roblee, Riverside (1935).....Councilor 1st District
William Duffield, Los Angeles (1933)..Councilor 2nd District
Henry J. Ullmann, Santa Barbara (1934).....
.....Councilor 3rd District
Fred R. DeLappe, Modesto (1935)....Councilor 4th District
Alfred L. Phillips, Santa Cruz (1933)..Councilor 5th District
Karl L. Schaupp, San Francisco (1934).....
.....Councilor 6th District
Oliver D. Hamlin, Oakland (1935).....Councilor 7th District
Robert A. Peers, Colfax (1933).....Councilor 8th District
Henry S. Rogers, Petaluma (1934)....Councilor 9th District
George G. Hunter, Los Angeles (1935)....Councilor-at-Large
Harry E. Zaiser, Orange (1933).....Councilor-at-Large
William H. Kiger, Los Angeles (1934)....Councilor-at-Large
Morton R. Gibbons, San Francisco (1935).....
.....Councilor-at-Large
T. Henshaw Kelly, San Francisco (1933).....
.....Councilor-at-Large
Junius B. Harris, Sacramento (1934).....Councilor-at-Large

ELECTED DELEGATES (120)

Delegates	Alternates
Alameda County (9)	
Lemuel P. Adams	Dorothy Allen
Frank S. Baxter	Leonard Barnard
N. Austin Cary	William Channell
Charles A. Dukes	Lloyd Kindall
Edward N. Ewer	T. C. Lawson
Robert A. Glenn	Donald D. Lum
Henning Koford	Ergo A. Majors
Albert M. Meads	William H. Sargent
Frank R. Makinson	Harold G. Trimble
Butte County (1)	
Frank M. Whiting	H. O. Ellis
Contra Costa County (1)	
U. S. Abbott	S. N. Weil
Fresno County (3)	
T. F. Madden	George Walker
R. W. Dahlgren	Neil Jorgensen
George Sciaroni	Hyman Ginsberg
Humboldt County (1)	
C. Lane Falk	Orris R. Myers
Imperial County (1)	
No name received	No name received
Kern County (2)	
F. J. Gundry	E. A. Schaper
P. J. Cuneo	A. R. Moodie
Lassen-Plumas County (1)	
George S. Martin	G. R. Fortson
Los Angeles County (38)	
Eliot Alden	Edwin S. Bennett
John V. Barrow	B. C. Davies
E. W. Barton	Kenneth S. Davis
Fred B. Clarke	Walter Holleran
Robert V. Day	John L. Kirkpatrick
Wallace Dodge	Harry W. Martin
Paul Ferrier	H. G. McNeil
E. W. Hayes	E. E. Moody
Walter L. Huggins	John P. Nuttall
Elmer E. Kelly	J. J. O'Brien
E. Eric Larson	George Piness
Leo J. Madsen	Carl W. Rand
Percy T. Magan	Joseph K. Swindt
William R. Molony, Sr.	R. G. Taylor
W. S. Mortensen	R. A. Terry
Thomas C. Myers	Roy Thomas
Philip Stephens	George Thomason
Charles T. Sturgeon	John Vruwink
David Thomson	H. G. Westphal
C. G. Toland	H. J. Wiley
Peter H. Blong	C. Max Anderson
John H. Breyer	Joseph T. Axline
Harry V. Brown	Walter A. Bayley
R. Manning Clarke	O. W. Butler
William H. Daniel	Egerton Crispin
John Dunlop	John W. Crossan
Scott D. Gleeten	Philip S. Doane
Orrie E. Ghrist	Newton Evans
Lowell S. Goin	William W. Hutchinson
Carl R. Howson	Lyle G. McNeile
J. M. Klein	James F. Percy
George D. Maner	F. M. Pottenger
Robert E. Ramsay	Eleanor Seymour
John C. Ruddock	John W. Shuman
A. J. Scott	F. C. Swearingen
Leroy B. Sherry	Hiram B. Tebbetts
Henry Snure	Walter Wessels
Harry H. Wilson	A. H. Zeller
Marin County (1)	
Chester A. DeLancey	L. L. Stanley
Mendocino County (1)	
R. A. Cushman	Royal Scudder
Merced County (1)	
F. O. Lien	B. E. McDowell
Monterey County (1)	
R. A. Kocher	W. M. Gratiot
Napa County (1)	
M. M. Booth	D. H. Murray
Orange County (3)	
Dexter R. Ball	Willis P. Baker
John I. Clark	Harry G. Huffman
John Luther Maroon	Rowland P. Yeagle
Placer County (1)	
William M. Miller	C. E. Lewis
Riverside County (2)	
H. S. Faris	A. L. Bramkamp
T. A. Card	C. E. Atkinson
Sacramento County (3)	
Philip G. Young	Maurice A. Hopkins
Edward S. Babcock	H. M. Kanner
Nathan G. Hale	Leo W. Farrell
San Benito County (1)	
R. L. Hull	E. E. McKay
San Bernardino County (3)	
G. S. Landon	A. T. Gage
C. L. Emmons	C. F. Whitmer
H. G. Hill	S. B. Richards
San Diego County (5)	
Fraser L. Macpherson	Frank St. Sure
Clarence E. Rees	W. D. Rolph
Donald K. Woods	W. O. Weiskotten
W. H. Barrow	George D. Huff
C. O. Tanner	Roy M. Ledford
San Francisco County (17)	
Philip H. Arnot	LeRoy Brooks
Elbridge J. Best	C. Latimer Callander
Edwin L. Bruck	Elizabeth A. Davis
Harold Brunn	G. D. Delprat
Edward C. Bull	William Dock
Howard W. Fleming	Randolph G. Flood
Philip K. Gilman	Emile Holman
Irving S. Ingber	Alexander S. Keenan
William J. Kerr	Robert C. Martin
Alson R. Kilgore	Stanley H. Mentzer
George W. Pierce	John J. Loutzenheiser
Langley Porter	Lewis Michelson
George K. Rhodes	Kaspar Pischel
Emmet Rixford	Philip H. Pierson
Edward B. Towne	H. A. L. Ryfkogel
J. Homer Woolsey	I. Walton Thorne
Rodney A. Yoell	William C. Voorsanger
San Joaquin County (2)	
Dewey R. Powell	C. A. Broaddus
George H. Sanderson	R. T. McGurk
San Luis Obispo County (1)	
H. S. Walters	James M. Marshall
San Mateo County (2)	
William H. Murphy	Howard Mawdsley
Hartzell H. Ray	H. Wade Macomber
Santa Barbara County (2)	
Hugh Freidell	Rexwald Brown
Richard D. Evans	H. E. Henderson
Santa Clara County (4)	
C. M. Burchfiel	James P. Lovely
E. P. Cook	George L. Barry
A. A. Shufelt	R. Stanley Kneeshaw
C. K. Canelo	Edward Liston
Santa Cruz County (1)	
L. M. Liles	F. P. Shenk
Shasta County (1)	
Ferdinand Stabel	B. F. Saylor
Siskiyou County (1)	
Charles C. Dickinson	Victor Hart
Solano County (1)	
Philip B. Fry	John W. Green
Sonoma County (1)	
J. Leslie Spear	J. Walter Seawell
Stanislaus County (1)	
R. S. Hiatt	E. F. Hagedorn
Tehama County (1)	
F. J. Bailey	J. H. Belyea
Tulare County (1)	
H. G. Campbell	S. S. Ginsburg
Tuolumne County (1)	
H. D. Rose	G. C. Wrigley
Ventura County (1)	
Sterling Clark	Grundy Coffey
Yolo-Colusa-Glenn County (1)	
Charles F. Keith	Thomas E. Cooper
Yuba-Sutter County (1)	
E. E. Gray	F. W. Didier

I—GENERAL MEETINGS

All General Meetings will be held in the Auditorium

FIRST GENERAL MEETING

Monday, April 24, 10:30 a. m.

JOSEPH M. KING, M. D., *President*, Presiding Officer

1. *Invocation*—Rev. Ernest Bradley, Rector of Del Monte Episcopal Church.
2. *Address of Welcome*—John P. Sandholt, M. D., Mayor of Monterey.
3. *Medicine at the Cross Roads*—Ray Lyman Wilbur, M. D., Palo Alto.
4. *The Significance to the Medical Profession of the Report of the Committee on the Costs of Medical Care*—Arthur C. Christie, M. D., Washington, D. C.
5. *New Forms of Medical Practice*—R. G. Leland, M. D., Director of Bureau of Medical Economics, American Medical Association, Chicago.

*

SECOND GENERAL MEETING

Tuesday, April 25, 11:30 a. m.

CHARLES A. DUKES, M. D., *Chairman of Committee on Public Relations*, Presiding Officer

1. *Alameda County Plan for the Care of Indigent and Part-Pay Patients*—George G. Reinle, M. D., Oakland, President-Elect of California Medical Association.
2. *San Diego County Medical Association Plan for Medical Service*—Hall S. Holder, M. D., San Diego.
3. *Discussion*—By A. C. Christie, M. D., Washington, D. C., and R. G. Leland, M. D., Chicago.
4. *Twelve Years in Organized Group Practice as Related to the Majority Recommendations of the Committee on the Costs of Medical Care*—Rexwald Brown, M. D., Santa Barbara.

*

THIRD GENERAL MEETING

Wednesday, April 26, 11:30 a. m.

GEORGE G. REINLE, *President-Elect*, Presiding Officer

1. *The Nature of Pernicious Anemia and a Consideration of Recent Advances in the Treatment of the Disease*—Cyrus C. Sturgis, Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan.
2. *Living Grafts of Endocrine Glands*—Harvey B. Stone, M. D., Baltimore, Maryland.

II—HOUSE OF DELEGATES MEETINGS

30th ANNUAL SESSION

Bali Room, Hotel Del Monte

PROGRAM OF FIRST MEETING

Monday, April 24, 8 p. m.

Members of the California Medical Association who attend are requested not to take seats reserved for delegates, in order to avoid confusion when votes are being taken.

Order of Business

1. Call to order.
2. Announcement by the Speaker on personnel of:
   (a) Credentials Committee:
   Lemuel P. Adams, Oakland; Charles T. Sturgeon, Los Angeles; Dexter R. Ball, Santa Ana.
   (b) Reference Committee on Reports of Officers and of Standing Committees:
   Alson Kilgore, San Francisco; E. Eric Larson, Los Angeles; William Dock, San Francisco.
   (c) Reference Committee on Resolutions and on New and Miscellaneous Business:
   William R. Molony, Sr., Los Angeles; Irving S. Ingber, San Francisco; Thomas A. Card, Riverside.
3. Report of Credentials Committee.
4. Roll Call.
5. Address of President Joseph M. King.
6. Report of the Council, Oliver D. Hamlin, Chairman.
7. Report of the Auditing Committee, T. Henshaw Kelly, Chairman.
8. Report of the Secretary-Treasurer, Emma W. Pope.
9. Report of the Editor, George H. Kress.
10. Report of the General Counsel, Hartley F. Peart.
11. Report of the Chairman of the Committee on Public Relations, Charles A. Dukes.
12. Report of the Chairman of the Cancer Commission, Charles A. Dukes.
13. Report of the Board of Trustees of the California Medical Association, O. D. Hamlin, President.
14. Unfinished business.
   (a) Amendments to Constitution.
15. New business. (Introduction of resolutions.)
16. Reading and adoption of minutes.
17. Adjournment.

PROGRAM OF SECOND MEETING

Wednesday, April 26, 8 p. m.

Members of the California Medical Association who attend are requested not to take seats reserved for delegates, in order to avoid confusion when votes are being taken.

Order of Business

1. Call to order.
2. Roll call.
3. Announcement of meeting place of 1934 annual session.
4. Election of:
   (a) President-Elect.
   (b) Speaker of House of Delegates.
   (c) Vice-Speaker of House of Delegates.
   (d) Councilors.
   Second District—Incumbent, William Duffield, Los Angeles (1933).
   Fifth District—Incumbent, Alfred L. Phillips, Santa Cruz (1933).
   Eighth District—Incumbent, Robert A. Peers, Colfax (1933).
   Councilors-at-Large—Incumbents:
   Harry E. Zaiser, Orange (1933).
   T. Henshaw Kelly, San Francisco (1933).
   (e) Delegates and Alternates to American Medical Association for sessions 1934-1935.
   Incumbents of sessions 1932-1933 are:

Delegates	Alternates
Dudley Smith Oakland	LeRoy Brooks San Francisco
William Duffield Los Angeles	William H. Gilbert Los Angeles
F. C. E. Mattison (deceased) Pasadena	Fred B. Clarke Long Beach Charles D. Lockwood*

5. Approval of members of standing committees elected by the Council.
6. Report of Reference Committee on Reports of Officers and Standing Committees.
7. Report of the Reference Committee on Resolutions and on New and Miscellaneous Business.
8. Presentation of President.
9. Presentation of President-Elect.
10. Reading and adoption of minutes.
11. Adjournment.

* Deceased. Note.—The late Charles D. Lockwood was alternate for 1933-1934 to Delegate Carl R. Howson.

III—OFFICIAL MEETINGS

Hours and Places Where Held

MEETINGS

General Meetings

All general meetings will be held in the auditorium.
Monday, 10:30 to 12:30 p. m.—Addresses by invited guest speakers.
Tuesday, 11:30 a. m. to 1 p. m.—Medical Economics meeting.
Wednesday, 11:30 a. m. to 1 p. m.—Addresses by invited guest speakers.

Meetings of the House of Delegates

Monday and Wednesday evenings, April 24 and 26, at 8 p. m. in Bali Room, Hotel Del Monte.

Council Meetings

All meetings of the Council will be held in Room 723.
First meeting, Sunday, April 23, 8 p. m.
Second meeting, Monday, April 24, 2:30 p. m.
Third meeting, Tuesday, April 25, 2:30 p. m.
Fourth meeting, Wednesday, April 26, 2:30 p. m.
Fifth meeting, Thursday, April 27, 9 a. m.

Meeting of Committee on Scientific Work

Members will meet at luncheon on Wednesday, April 26, in the small dining-room off the main dining-hall.

Section Meetings

These are given under major heading "VIII—Section Meetings," which follows.

Organization Meetings of All Standing Committees

Members of all Standing Committees are urged to contact one another and to meet and organize for the coming year by the election of a chairman and secretary, and appointment of advisory members; and to discuss plans for the next year's work.

Table I—Time and Places of Various Meetings and Entertainment

Sunday April 23	8 p. m.	Council (Room 723).
Monday April 24	10:30 a. m.-1 p. m. 2:30-5 p. m. 2:30 p. m. 8 p. m.	First General Meeting (Auditorium). Section Meetings. (For Section Meetings, see Table 2.) Council (Room 723). First House of Delegates Meeting (Bali Room).
Tuesday April 25	8:30-11:30 a. m. 11:30 a. m.-1 p m. 1 p. m. 2:30 p. m. 7:30 p. m.	Section Meetings. General Meeting (Auditorium). Luncheon for State and County Officers of California Medical Association (Copper Cup Room). Council (Room 723). Dinner and Entertainment in honor of the President (Main Dining Room and Auditorium).
Wednesday April 26	8:30-11:30 a. m. 11:30 a. m.-1. p. m. 1 p. m. 2:30 p. m. 8 p. m.	Section Meetings. General Meeting (Auditorium). Luncheon for Committee on Scientific Work (Small Dining Room). Council (Room 723). Second House of Delegates Meeting (Bali Room).
Thursday April 27	8:30-11:30 a. m. 9 a. m.	Section Meetings. Council (Room 723).

Table II—Time and Places of Section Meetings

	Auditorium	Bali Room	Copper Cup Room	Tower Room	Club Room	Private Dining Room	Sun Porch	Children's Play Room No. 2
Monday April 24 2-5 p. m.	Medicine	Surgery	Obstetrics and Gynecology	Urology	Radiology	Dermatology	Anesthesiology	Pathology
Tuesday April 25 8:30-11:30 a. m.	Medicine	Surgery (Joint meeting with Radiology) Dr. Stone	Obstetrics and Gynecology	Urology	Anesthesiology	Dermatology		Pathology
Wednesday April 26 8:30-11:30 a. m.	Medicine (Joint meeting with Pathology) Dr. Sturgis	Surgery	Pediatrics	Eye, Ear, Nose and Throat	Neuropsychiatry	Industrial Medicine and Surgery		
Thursday April 27 8:30-11:30 a. m.	Medicine	Surgery	Pediatrics	Eye, Ear, Nose and Throat	Neuropsychiatry	Industrial Medicine and Surgery		

Auditorium, Bali Room, Copper Cup, Club Room, and Children's Play Room No. 1 are located on the ground floor. Arrows at the foot of stairway indicate location of rooms.
The Tower Room is reached by the elevator off the main lobby. The Sun Porch is off the main lobby.
The Private Dining Room is off the Main Dining Room.

IV—SCIENTIFIC EXHIBITS

Exhibits in Viewing-Boxes

(a) *Bone Changes of Hyperthyroidism*—John Dexter Camp, M. D., Mayo Clinic, Rochester.

Many bone changes that have heretofore been unexplained have recently been found to be due to hyperparathyroidism. These consist chiefly of a diffuse rarefaction of the bone with subperiosteal cyst-like areas and at times the typical changes of osteitis fibrosis cystica. The exhibit of two hundred films demonstrates those changes which have been proved to be associated with over- or abnormal activity of the parathyroids.

(b) Exhibit by the Department of Public Health, San Francisco Hospital. By E. Rosencrantz, M. D., San Francisco.

1. Pneumokoniosis from various sources.
2. Caseous pneumonias with and without atelectasis —all proven by autopsy.
3. Chronic pulmonary tuberculosis showing healing.
4. Chronic pulmonary tuberculosis with unusual caritation.
5. Chronic pulmonary tuberculosis with cold abscess of thorax (over two years' duration) proven by autopsy.
6. Chronic pulmonary tuberculosis—hilum form.
7. Multiple bone lesions with sinuses—cured.
8. Congenital cyst of the lung.
9. Gangrene of the lung.
10. Tuberculous hydropneumothorax—cured.

The Healing of Bone Following Injury and Infection

Keene O. Haldeman, M. D.
350 Post Street, San Francisco

An experimental and clinical study in five parts: (1) The healing of simple fractures. (2) The rôle of periosteum in the healing of fractures. (3) A comparison of various types of bone grafts. (4) The influence of bone salts on the repair of bone. (5) Osteomyelitis. (*a*) Experimental. (*b*) Clinical.

Roentgen-ray and microscopic pictures mounted on cardboard. One hundred and fifty experiments and several clinical cases of osteomyelitis form the basis for this study.

Casts and Models of Club-Feet, With Motion Pictures

Frank A. Lowe, M. D.
540 Flood Building, San Francisco

Cutaneous Manifestations of Arsenic Poisoning

Samuel Ayres, Jr., M. D.
and
Nelson Paul Anderson, M. D.
2007 Wilshire Boulevard, Los Angeles

An exhibit consisting of clinical photographs, charts, and histologic sections of skin showing the presence of arsenic as revealed by microchemical stains. The Gutzeit method for the quantitative determination of arsenic will be demonstrated.

Urinary Calculi

A. Elmer Belt, M. D.
and
Donald A. Charnock, M. D.
723 Pacific Mutual Building, Los Angeles

A collection of calculi from all portions of the urinary tract with diagrams representing their location prior to removal and data covering their formation, densities, and obstructive uropathies.

V—ENTERTAINMENT PROGRAM

For descriptive text concerning Del Monte and Monterey, see page 288.

President's Dinner—Tuesday Evening, April 25, 7:30 p. m., in Main Dining Room.—The entertainment for the President's dinner will be simpler than in previous years, but it is hoped that it will meet the approval of those present.

Del Monte affords many amusements to occupy the spare moments of the convention. Golf, tennis, swimming, fishing, scenic drives and other entertainment may be arranged at any time.

Dr. Harry Alderson is golf chairman. Arrangements for the usual tournaments will be made by him.

Busses and cars will be furnished for the drives upon application. Notice of moving pictures and other entertainment will be given at the time of the convention.

Golf Announcement.—Through the courtesy of the president, Max Rothschild, California Medical Association members are invited to participate in a tournament planned for the Northern California Medical Golf Association at Del Monte Golf Course on Sunday, April 23;. also a golf dinner to be held at the Hotel Del Monte, Saturday afternoon, April 22.

Those who are guests of hotel will not be charged extra for dinner. For nonguests a charge of $2 will be made.

To enable the committee to make proper arrangements, we must know definitely three days in advance how many will attend the dinner and participate in the tournament. Be sure to inform us regarding your latest club handicap.

No tournaments are to be held during the actual state meeting, but during the free time, members can arrange to play through Peter Hay, the professional at Del Monte. See also bulletin board notices.

HARRY E. ALDERSON, *Chairman.*

VI—HOTEL AND RAILROAD INFORMATION

HOTEL RATES

HOTEL DEL MONTE, CONVENTION HEADQUARTERS

RATES FOR ANNUAL SESSION, APRIL 24-27, 1933

Only American Plan rates are quoted by the Hotel Del Monte. The rates published in the March issue of CALIFORNIA AND WESTERN MEDICINE have been revised and the following have since been quoted:

Main Building and Cottages:

Single room with bath (one person), $9 per day.
Double room with bath (two persons), $8 each person per day.
Sitting room, $6.

Both Wings:

Single room without bath (one person), $7 per day.
Double room without bath (two persons), $6.50 each person per day.
Single room with bath (one person), $8 per day.
Double room with bath (two persons), $7 each person per day.

Two single rooms with bath between (two persons), $7.50 each person per day.
Two double rooms with bath between (four persons), $6.50 each person per day.

* * *

OTHER HOTELS IN VICINITY OF DEL MONTE*

MONTEREY

San Carlos Hotel (European plan—without meals):
Single room with shower bath.....$2.50
Double room with shower bath.....$4.50 ($2.25 each)
Single room with tub bath.....$3.00
Double room with tub bath.....$5.00 ($2.50 each)
Twin beds with tub bath....$5.50 to $7 ($2.25 to $3.50 each)
Three single beds, one room.....$7.50 ($2.50 each)
Four single beds, one room.....$9.00 ($2:25 each)
Any room in house—American plan (with meals)....$5 day

Monterey Hotel:
Single without bath.....$1.50 and $2.00
Double without bath.....$2.00 and $2.50 ($1.00-$1.25 each)
Single with bath.....$2.00 and $2.50
Double with bath.....$3.00 and $3.50 ($1.50-$1.75 each)

Kimball Hotel:
Single.....$1.50 to $3.00
Double.....$2.00 to $4.50

Mission Inn:
Single without bath.....$1.50
Double without bath.....$2.00 ($1.00 each)
Single with bath.....$2.50-$3.00
Double with bath.....$3.00-$4.00 ($1.50-$2.00 each)
Double with twin beds.....$4.00-$5.00 ($2.00-$2.50 each)

Hotel Serra:
Single without bath.....$1.50-$2.00
Single with shower.....$2.00
Double with shower.....$3.00 ($1.50 each)
Single with bath.....$2.50
Double with bath.....$3.50 ($1.75 each)

Royal Hotel:
Single without bath.....$1.25-$1.50
Double without bath.....$2.00 ($1.00 each)
Single with bath.....$2.00
Double with bath.....$2.50 ($1.25 each)

Highlands Inn:
American Plan:
Single room.....$6.50
Double room.....$11.00-$12.00
European Plan:
Single room.....$3.50
Double room.....$5.00-$6.00

PACIFIC GROVE

Forest Hill:
Single with bath.....$2.50
Double with bath.....$3.50 ($1.75 each)
Twin beds with bath.....$4.50 ($2.25 each)

Del Mar Hotel:
Single without bath.....$1.00-$1.50
Double without bath.....$1.50-$2.50 (75c to $1.25 each)
Single with bath.....$1.50-$2.50
Double with bath.....$2.00-$2.50 ($1.00-$1.25)

CARMEL

Pine Inn and the *La Playa Hotels* have rates with meals (American plan) from $5.00 and $5.50 to $6.50 each (deducting price of meals missed).
The La Ribera (without meals), $3.00 single and $4.00 and $5.00 double.

* Note. These hotels and rates are not official. This information was received from the Monterey Chamber of Commerce and is here printed for the convenience of members who may be interested.

RAILROAD INFORMATION*

April 24–27, 1933

FROM	21-DAY TICKET	3-MONTH TICKET	PULLMAN—EACH WAY LOWER	PULLMAN—EACH WAY UPPER	CHAIR CAR
San Francisco	$ 5.95	$ 7.15	.....	.....	75c
Los Angeles	18.35	22.00	$4.50	$3.60	$1.00
Santa Barbara	13.30	15.95	.....	.....	1.00
San Diego to Del Monte Jct.	24.35	None	.....	.....	.....
San Diego to Los Angeles	.....	.....	3.00	2.40	.....

RAILROAD SERVICE

	DAYLIGHT	DEL MONTE EXPRESS	SUNSET
Leave San Francisco..	8:00 a. m.	3:05 p. m.	6:45 p. m.
Arrive Del Monte.....	11:16 a. m.	6:15 p. m.	10:09 p. m.

	DAYLIGHT	COASTER
Leave Los Angeles.....	8:00 a. m.	10:00 p. m.
Arrive Del Monte.....	6:33 p. m.	9:46 a. m.

	DAYLIGHT	COASTER
Leave Santa Barbara.....	11:10 a. m.	1:20 a. m.
Arrive Del Monte.....	6:33 p. m.	9:46 a. m.

SANTA FE

Leave San Diego.....	2:10 a. m.	2:15 p. m.
Arrive Los Angeles.....	7:15 a. m.	5:35 p. m.

Service afforded by Daylight Limited, the Del Monte and Sunset Limited from San Francisco. Service from Southern California by Daylight Limited and Coaster.

* What is here given is printed for its general informative value. It is wise to check on your own ticket rates and time tables.

VII—WOMAN'S AUXILIARY

WOMAN'S AUXILIARY
to the
CALIFORNIA MEDICAL ASSOCIATION
1933 Annual Convention
Hotel Del Monte, Del Monte
April 24–27, 1933

Convention Chairman
Mrs. William H. Sargent
Assisted by Mrs. Thomas Clark

COMMITTEES

STUDIO TOUR
Mrs. Wilson Davidson

TRANSPORTATION
Mrs. Spencer Hoyt

REGISTRATION AND INFORMATION
Mrs. Hiram Curry, Chairman
Mrs. Harold Trimble
Mrs. Frank Bowles
Mrs. D. Jefferies
Mrs. Louis Dyke
Mrs. Robert Leet
Mrs. Arthur Arehart
Mrs. Alvin Powell
Mrs. Claire Razor
Mrs. Robert Sutherland

DECORATIONS AND FLOWERS
Mrs. A. A. Alexander
Mrs. Robert Glenn

GARDEN TOUR
Mrs. Robert Glenn

PUBLICITY
Mrs. Arthur Arehart
Monterey
Mrs. Spencer Hoyt
Monterey

GOLF
Mrs. W. M. Gratiot

USHERS AND PAGES
Mrs. W. W. Crane
Mrs. Frank Baxter

RECEPTION
Mrs. C. A. Dukes, Chairman
Mrs. E. N. Ewer
Mrs. Charles Rowe
Mrs. Albert Rowe
Mrs. George Reinle

PROGRAM OF MEETINGS AND ENTERTAINMENT

Sunday, April 23

Arrival of delegates, members and guests.
Greeted by delegation hostesses.
6:30 p. m.—Round table dinner for Auxiliary members.
8:45 p. m.—Cancer Commission meeting, Copper Cup Room.

Monday, April 24

8:45 a. m.—Meeting, State Board.
9:00 a. m. to 1:00 p. m.—Registration in Sun Room.
10:00 a. m.—Presidential Address—Discussion of Medical Economics by guest speakers, Hotel Del Monte, Auditorium. All Auxiliary members and doctors' wives are invited.
2:00 p. m.—Tour of studios in Carmel. Mrs. Wilson Davidson, Chairman.
6:30 p. m.—Round table dinner for Auxiliary members.
8:45 p. m.—Reception and musicale in honor of Mrs. James Percy, National Auxiliary President, and wives of guest speakers. Lobby.
The State Board will act on Reception Committee.

Tuesday, April 25

8:30 a. m. to 4:00 p. m.—Registration.
9:30 a. m.—Opening session of fourth annual convention, Mrs. F. E. Coulter presiding.
1:00 p. m.—Luncheon in honor of Mrs. F. E. Coulter, Del Monte Hotel Solarium if weather permits, dining room if inclement. Dr. Joseph King and Dr. George Reinle, guest speakers. Mrs. James Percy will preside. Mrs. Thomas Clark, Chairman.
2:30 p. m.—Garden tour of Del Monte gardens, personally conducted by Mr. Eddy, in charge of Del Monte nursery.
7:30 p. m.—President's dinner, Del Monte Hotel.

Wednesday, April 26

9:00 a. m. to 11:00 a. m.—Registration.
9:30 a. m.—Second session and election of officers.
1:00 p. m.—Luncheon in honor of president-elect, Pebble Beach Lodge. Sightseeing drive down the new Ocean Coast Highway, or guests may remain at Lodge for cards. Mrs. Arthur A. Arehart, Chairman, assisted by Mrs. Spencer Hoyt.
8:30 p.m.—Carmel Community Players present "Ladies of the Jury," a comedy by Fred Ballard, at the Carmel Community Playhouse.

All meetings will begin promptly on schedule.

Wives of all doctors are cordially invited to participate in the Auxiliary's activities and attend the convention session.

DEL MONTE AND THE MONTEREY DISTRICT

DEL MONTE

California's 20,000-acre playground, sport and social center, located between Los Angeles and San Francisco.

An observing traveler once said that Del Monte is all things—at once. His description, however brief, doesn't come far from the mark. For within Del Monte's vast estate of 20,000 acres is nearly every description of recreation and sport imaginable.

Golf.—Would you golf? Within a three-mile radius of Del Monte are five courses: more, in such a concentrated area, than is to be found elsewhere in the world. One of these courses, famous Pebble Beach, was the scene in 1929 of the National Amateur championship. At that time Bobby Jones called it the most picturesque and playable layout of his experience. Cypress Point, Del Monte, the Monterey Peninsula Country Club courses, and Pacific Grove's fine municipal course complete the list.

Tennis.—Is tennis your sport? Del Monte has eleven courts. Every June witnesses the Del Monte tennis championship when fine players from all parts of the coast gather to match their skill.

Trapshooting.—Do you go in for trapshooting? Del Monte has the largest and one of the best equipped set of traps in the country. Official gathering place of the Pacific International Trapshooting Association, the Del Monte grounds present the sport at its best. State and sectional tournaments are held there annually as well as the yearly sports powwow of the California Indians in April.

The Copper Cup Room at Hotel Del Monte, where meetings of the California Medical Association will be held during the convention from April 24 to 27.

Fishing and Hunting.—Perhaps your sport is fishing. Or hunting. There, too, Del Monte offers the best to be found. But one hour by motor from Del Monte, up the Carmel Valley, is San Clemente, Del Monte's guest ranch. Adjoining and extending into the great national forest that lies between the Salinas Valley and the coast, San Clemente offers the nimrod and hunter their heart's desire. Then, of course, there are the world-famous waters of Monterey and Carmel Bays for deep-sea fishermen.

Swimming.—Perhaps your favorite pastime is swimming, and the popular and healthful fad of sun-bathing. Del Monte provides complete facilities to satisfy your desires. The Roman Plunge in the beautiful and spacious hotel park has heated salt water and is open the year round with a smaller and safe plunge for children. The Beach Club at Pebble Beach has an open-air tank at the water's edge. Then there are the white sandy beaches on Monterey and Carmel Bays and the Pacific Ocean to enjoy surf bathing, and the ol' swimmin' hole at the Monterey Peninsula Country Club is another favorite spot.

Trails.—Have you tried the bridle paths at Del Monte? If not, you have missed a treat. There are more than one hundred miles of privately owned and signed scenic paths in the forest and along the beaches. A stable of fine mounts is maintained. By all means bring your riding togs.

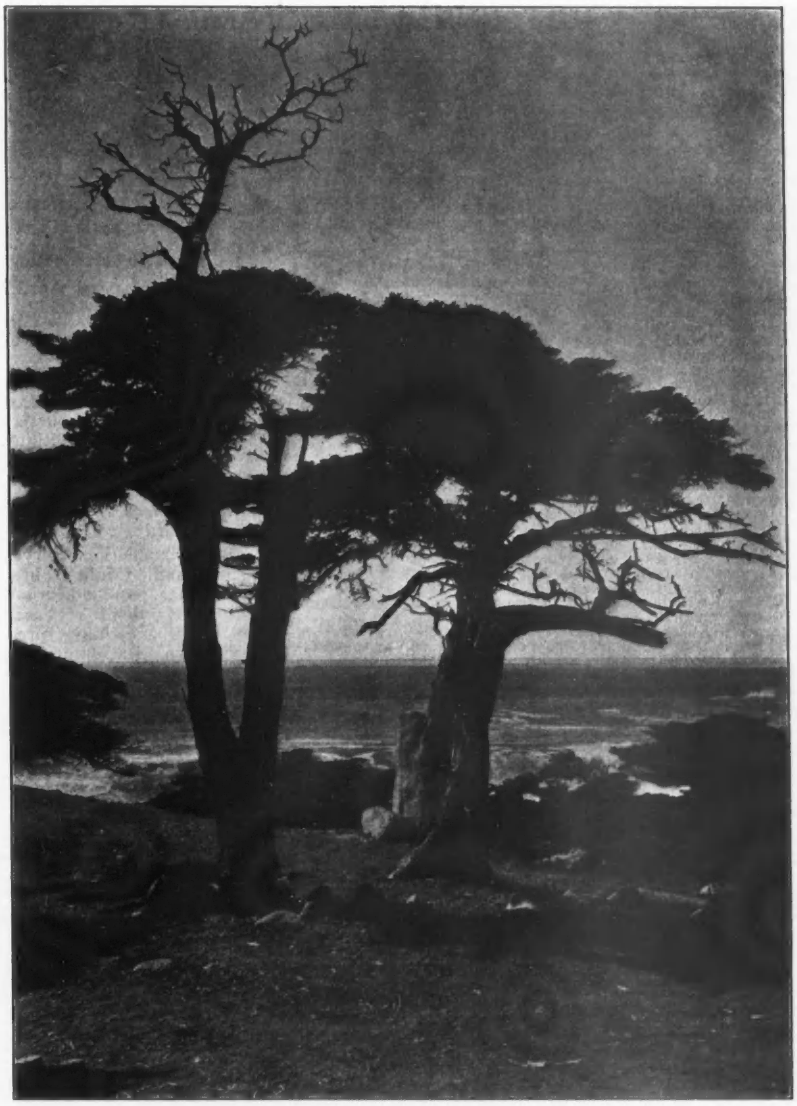
Motoring.—Del Monte is a paradise for motorists. Del Monte Forest alone has more than one hundred miles of scenic boulevards within its toll gates, and there are wonderful interesting scenic trips down the Carmel Highlands and up the Carmel Valley, to the Mission of Carmel, San Juan Bautista—the best bit of old California in existence—the redwoods of Santa Cruz and, of course, the magnificent coast highway to the Big Sur River.

Railroads.—Easily reached, Del Monte is 125 miles south of San Francisco and 375 miles north of Los Angeles. It is served by excellent highways and directly by the Southern Pacific Lines. An easy three-hour trip from San Francisco and but overnight from Los Angeles, it has, since 1880, set a standard of excellence in the resort world which it jealously guards.

State Highway, United States No. 101, offers a comfortable and scenic automobile ingress from all parts of California.

Del Monte is on the Coast Line of the Southern Pacific Company between Los Angeles and San Francisco. By motor, it is a comfortable and scenic ride from all sections of the state. Leaving the Coast Highway, 101, at Salinas, there are eighteen miles of wide, surfaced, modern highway that make the trip a matter of only twenty minutes or so.

"Don't Miss Del Monte and the Monterey Peninsula," is a slogan travelers have been using for more than fifty years!



The grandeur of Pebble Beach, California. This photo, taken from the world-famous Seventeen Mile Drive, suggests the rugged splendor of the sea and Monterey coast. Here the blue of the Pacific mingles with the sky and age-old cypress to produce vistas of unforgettable power. Pebble Beach is an exclusive residential section of the Monterey Peninsula.

MONTEREY

Monterey Peninsula is richly endowed with travel interest. Here are attractions for everyone. Historic-minded motorists who travel with guide book and camera, and others who merely poke around for the fun that's in it, both find their heart's desire within California's famous "Circle of Enchantment."

Good roads, clearly marked, lead the willing motorist to points of special charm and reveal vistas and scenes which artists have chosen to proclaim the most beautiful anywhere. A trip to the Monterey Peninsula and along the coast to the Big Sur may indeed be called a trip so memorable as never to be forgotten.

The city of Monterey is in itself nearly enough reward for having made the trip. Monterey was discovered by the Spaniard Cabrillo in 1542. He called it "Bay of the Pines," and as such was it known until 1602, a decade before the Pilgrims landed on eastern shores, when Vizcaino rediscovered it and called it Monterey (King of the Forests) after the Compte de Monterey, then Viceroy of Mexico. Over a century and a half elapsed before white men again set foot on the soil of California. Then came Portola in 1770, who established the Monterey Presidio, and Padre Junipero Serra, who founded the San Carlos Mission.

Monterey was a gay place under Spanish rule. All the glamor of old Spain held forth then, and life there was a perpetual care-free fiesta. In 1821 Mexico threw off the Spanish yoke and a period of unrest followed, culminating in 1846, when Commodore Sloat raised the Stars and Stripes over the historic Customs House and Monterey became an American possession.

Monterey abounds with historic and beautiful points of interest. Visitors there would do well not to miss the following landmarks: ***San Carlos Church,*** founded in 1770 by Junipero Serra and once the place of worship for representatives of the Spanish throne, governors and Presidio officers; ***Monterey Presidio,*** established by Portola in 1770 and prominent throughout Monterey's history; ***First Theater in California,*** used by picturesque strolling players as early as 1847. Of great interest, this building is now open as a public museum. ***Customs House,*** over which have flown the flags of Spain, Mexico and the United States; ***Colton Hall,*** first capitol building of California. Here was drafted the constitution of California. ***Stevenson House:*** The beloved Robert Louis Stevenson lived and wrote much of his memorable works in Monterey. Praise of the Monterey coast is to be found in many of his books.

Seventeen Mile Drive.—No trip to the Monterey Peninsula is complete, of course, without including the world-famous Seventeen Mile Drive. The combinations of pines, age-old cypress and the sparkling blue of the Pacific is one that hundreds of artists have honored with their canvases.

VIII—SECTION MEETINGS

Rules Regarding Papers and Discussions at the Annual State Session:

Upon recommendation of the Executive Committee, the following rules regarding papers have been adopted by the Council:

1. All papers read before a section of an annual session are the property of CALIFORNIA AND WESTERN MEDICINE.

2. The maximum time that may be consumed by any paper is fifteen minutes, provided that not to exceed ten minutes' latitude may be allowed invited guests at the discretion of the presiding chairman.

3. The maximum time permitted any individual to discuss a paper is four minutes. This also applies to the author in closing his discussion. No speaker may discuss more than once any one subject. The presiding officer of each section is expected to enforce these rules.

4. A copy of each and every paper presented at the state meeting must be in the hands of the chairman or secretary of the section or in the hands of the general secretary before the paper is presented.

Each paper must be typewritten in double space. Single space and carbon copies are not acceptable.

5. All papers read at an annual session of the California Medical Association automatically become the property of the Association (By-Laws, Chapter VI, Section 4). The Committee on Publications of the official publication, CALIFORNIA AND WESTERN MEDICINE, decides whether or not the paper submitted is of such nature as to be published in full in CALIFORNIA AND WESTERN MEDICINE or in abstract form. (In case the latter procedure is followed, the expense of setting up the type for reprints may be borne by the Association.) It is also the ruling that when any section has a larger number of papers on its program than can be covered in a two-day session, that not more than the average number of papers from such section shall be printed, unless for special reasons. Manuscripts not accepted for CALIFORNIA AND WESTERN MEDICINE will be returned to the authors, for submission to other medical journals, is so desired.

6. Articles are accepted for place on the program on condition that they are also contributed **solely** to CALIFORNIA AND WESTERN MEDICINE. Authors desiring to publish their papers elsewhere than in the journal must make written request to the editor. Papers submitted at meetings of this Association must not have been previously submitted or printed elsewhere.

7. No paper will be accepted by the General Program Committee nor by Section Program Committees unless accompanied by a synopsis of not to exceed fifty words.

8. Papers shall not be "read by title." Papers should be original typewritten copies, double spaced, and should be handed to the section secretary after having been read.

9. No member may present more than one paper at any annual session, provided that a member may be a collaborator on more than one paper, if these papers are presented by different authors.

10. Failure on the part of an author to present a paper precludes acceptance of future papers from such author for a period of two years, unless the author explains to the satisfaction of the Executive Committee his inability to fulfill his obligation.

Numbering of Section Papers

For convenience in reference, papers are numbered in serial sequence for the entire session, instead of a separate sequence for each section.

Business Meetings of Sections

Time of business meetings and elections of officers of sections will be scheduled on section blackboards by section secretaries, and through preliminary announcements by section chairmen.

Unless otherwise announced, the business meeting of each section and the election of officers will be held immediately after the reading of the second paper on the second day's section program.

Section Index to This Program*

(Sections are arranged alphabetically. Numbers in parenthesis after each section indicate sequence reference numbers of papers read in each section.)

* Cancer Commission. The program of the Cancer Commission is printed in this issue in its department column.

I

ANESTHESIOLOGY SECTION

CAROLINE B. PALMER, M. D., *Chairman*
2557 Clay Street, San Francisco

JOHN MILLER WILSON, M. D., *Secretary*
605 Professional Building
65 North Madison Avenue, Pasadena

First Meeting—Sun Porch

Monday, April 24, 2 to 5 p. m.

1. *Chairman's Address—The Future of Anesthesiology as a Medical Specialty*—Caroline B. Palmer, M. D., San Francisco.

   Reasonable standards for the specialty. Present trend and causes. Logical consequences of pursuing present course. Methods for overcoming unfavorable conditions. Lay anesthesia and lay anesthetists. Adequate supply of properly trained medical anesthetists. Coöperation.

2. *The Principles of Basal Anesthesia With Avertin*—Edward H. Bolze, M. D., San Francisco.

   Introduction. Survey of pharmacological background. Clinical observations, with special reference to indications and contraindications. Management of case: selection; dosage; combined anesthesia; pre- and postoperative supervision. Presentation of three hundred cases of basal anesthesia with avertin. Conclusions.

   Discussion by Dorothy Wood, M. D., San Francisco.

3. *The Proposed International College of Anesthetists*—Mary E. Botsford, M. D., San Francisco.

   The growth of the Associated Anesthetists of the United States and Canada suggests the mutual advantage of a wider fellowship with anesthetists of other countries. Efforts to be made to secure foundations for the training of medical anesthetists. Qualifications for specialists.

   Discussion by William W. Hutchinson, M. D., Los Angeles.

4. *Psychic Factors in Anesthesia*—*H. G. Mehrtens, M. D., San Francisco. To be read by Pearl Pouppirt, M. D., San Francisco.

   Anesthesiology has much in common with psychiatry, particularly in its emphasis on the destructive influences of fear and psychic shock; its insistence on preoperative information concerning the personality makeup, previous anesthetic experiences and postoperative mental difficulties. Both specialties are interested in developing a technique to overcome fear and nervousness previous to anesthesia.

   Consideration of the psychic effects of different kinds of anesthetics and of the preanesthetic sedatives.

   The disadvantages of considering anesthesiology as separate from the other medical specialties. The necessity for the broadest medical viewpoint, including the psychiatric, in the modern practice of anesthesia.

   Discussion by Milton Lennon, M. D., San Francisco.

5. *Anesthesia in Gynecology*—Wesley J. Woolston, M. D., Pasadena.

   Operative gynecology principally abdominal surgery—importance of choosing carefully the anesthesia but more important the choice of the anesthetist. Advantages of coöperation between experienced graduate physician anesthetist and

* Deceased.

surgeon. Safety of patient rather than cost or convenience of administration. Laparotomies ten times as dangerous as plastic gynecologic surgery. Summary of 3067 histories of patients operated upon for pelvic infection. Heart and lung complications in gynecologic surgery. Nitrous oxid, oxygen or ethylene compared with regional or local anesthesia in gynecology.

Discussion by Henry A. Stephenson, M. D., San Francisco.

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Second Meeting—Club Room

Tuesday, April 25, 8:30 to 11:30 a. m.

6. *The Ill Status of the Nurse Anesthetist*—W. Chalmers Francis, M. D., Los Angeles. (By invitation.)

Educational requirements and standing when graduated: (*a*) Medical students; (*b*) Nurses. Legal requirements to obtain license, legal limitations to authority, legal duties in active work for (*a*) doctor; (*b*) nurse. Civil and legal liability of (*a*) doctor and (*b*) nurse. Dangers to nurse. Dangers and legal risk to doctor of administration of anesthesia by nurse. Court decisions.

7. *Spinal Anesthesia Technique, Records and Results.*—Louis H. Maxson, M. D., Seattle, Washington. (By invitation.)

Spinal anesthesia a vital part of the anesthetist's professional equipment. Harborview Hospital technique, with gravity control of level of anesthesia—simple and safe. Special record sheets, providing substantial basis for inferences drawn. Discussion of Trendelenburg position. Failures. Conclusions.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

8. *Clinical Experience with CO_2 Inhalations*—Randolph C. Flood, M. D., San Francisco.

Presentation of clinical experience with CO_2 in following conditions: congenital atelectasis; asphyxia; respiratory complications following tonsillectomies; bronchopneumonias with pulmonary edema. Method of administration. Charts showing relation of pulmonary ventilation blood CO_2 and respiratory rate demonstrating transition from respiratory decompensation to compensated respiratory ventilation.

Discussion by A. J. Wineland, M. D., Beverly Hills.

9. *Preanesthetic Drugs—A Review of Pharmacological Literature, With Clinical Implications*—Clinton H. Thienes, M. D., Los Angeles. (By invitation.)

A discussion of relative toxicities and preanesthetic efficiencies, as determined in the experimental laboratory. In addition, effects on the autonomic nervous system, liver and kidneys, and metabolism are described, and the absorption, fate and excretion correlated with clinical experience.

Discussion by Chauncey D. Leake, Ph. D., San Francisco.

10. *The Pros and Cons of Subarachnoid Block*—James C. Doyle, M. D., Los Angeles.

Analysis of 1124 cases anesthetized by means of subarachnoid block at the Hospital of the Good Samaritan in Los Angeles, during the period from 1930 to 1932 inclusive. Contraindications to its use. Advantages in cases where method is applicable discussed in detail.

II

DERMATOLOGY AND SYPHILOLOGY SECTION

LAURENCE TAUSSIG, M. D., *Chairman*
803 Fitzhugh Building
384 Post Street, San Francisco

LOUIS F. X. WILHELM, M. D., *Vice-Chairman*
1410 California Medical Building
1401 South Hope Street, Los Angeles

CHARLES J. LUNSFORD, M. D., *Secretary*
3115 Webster Street, Oakland

First Meeting, Private Dining Room

Monday, April 24, 2 to 5 p. m.

11. *Chairman's Address*—Laurence Taussig, M. D., San Francisco.

12. *Herpes Zoster—A Review of Efficacy of Various Forms of Therapy as Observed on Fifty Patients*—Harvey T. Olsan, M. D., Los Angeles. (By invitation.)

A one year's résumé of results obtained in the treatment of herpes zoster is presented. An effort is made to compare the respective values of each of three common methods of therapy employed, and to contrast results with the spontaneous evolution of the disease in the untreated patient.

Discussion by Hiram Miller, M. D., San Francisco.

13. *This paper has been withdrawn.*

14. *Cutaneous Manifestation of Arsenic Poisoning*—Samuel Ayres, Jr., M. D., and Nelson Paul Anderson, M. D., Los Angeles.

The widespread use of arsenic in industry, agriculture and for domestic uses is not generally recognized. Poisoning may result from exposure to relatively minute quantities in susceptible individuals. Erythematous, eczematous, exfoliative eruptions as well as keratoses, basal cell epitheliomas, Bowen's precancerous dermatosis, scleroderma, etc., may result from arsenic poisoning.

Discussion by J. C. Geiger, M. D., San Francisco.

15. *Anaphylactic Dermatitis Following Rattlesnake Bite.*—C. Ray Lounsberry, M. D., San Diego.

Review of literature on snake bite. Chemical analysis of venom. Systemic and dermatological symptoms which developed following bite. Emphasis placed on dermatological findings which are minimized in the literature. Discussion of treatment. Lantern slide demonstrations showing common rattlesnakes found in San Diego County. Museum specimens.

Discussion by Louis F. X. Wilhelm, M. D., Los Angeles.

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Second Meeting—Children's Play Room No. 1

Thursday, April 25, 8:30 to 11:30 a. m.

16. *A Study of a New Tissue Staining Method for the Identification of Spirocheta Pallida*—Stanley O. Chambers, M. D., Los Angeles.

A new tissue method devised by Krajian for staining *Spirocheta pallida* has been applied to the identification of the organism in tissue from primary lesions of syphilis. The objective was to offer a more rapid, simplified and accurate method and to compare it with the present dark field. Eighty lesions were examined.

Discussion by Hiram Miller, M. D., San Francisco.

17. *Clinical and Serological Results in the Treatment of Syphilis*—Kendal P. Frost, M. D., and H. Sutherland Campbell, M. D., Los Angeles.

A résumé of the results obtained in treatment of a group of selected cases over a period of

three to five years with an attempted evaluation of modern therapy.

Discussion by Hiram Miller, M. D., San Francisco.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

18. *Spinal Fluid Findings in Syphilis—A Statistical Study*—Norman N. Epstein, M. D., John M. Graves, and Samuel Sherman, M. D., San Francisco.

The spinal fluid findings in about five hundred patients treated in the syphilis clinic of the University of California are reported. The importance of spinal fluid examinations in the syphilitic patient is emphasized. Indications for spinal puncture are pointed out. (Lantern slides.)

Discussion by Stanley O. Chambers, M. D., Los Angeles.

19. *Agranulocytosis with Associated Skin Lesions, Following Salvarsan Therapy—Report of a Case*—Ernest K. Stratton, M. D., San Francisco.

The blood picture was a leukopenia with no granular cells, coming on three days after the fourth injection of neosalvarsan. The skin lesions consisted of necrotic ulcers on the scrotum, penis, perineum, and buttocks.

A brief discussion of the etiology and treatment with review of the literature.

Discussion by Louis F. X. Wilhelm, M. D., Los Angeles.

20. *Report of Bismuth Injections in the Treatment of Seventy-five Cases of Warts at the Cowell Memorial Hospital at the University of California*—C. J. Lunsford, M. D.; G. W. Binkley, M. D., and D. S. Fox, M. D., Oakland.

Review of the recent article appearing in the July, 1932, issue of *Archives of Dermatology and Syphilology* by Dr. Sophie A. Lurie. Cases classified in accordance with the site of lesions and type of verruca; charts of results of therapy after varying numbers of injections; conclusions drawn from body of the article evaluating this method of treatment.

Discussion by Sophie Lurie, M. D., Los Angeles.

III

EYE, EAR, NOSE AND THROAT SECTION

ISAAC H. JONES, M. D., *Chairman*
Wilshire Medical Building
1930 Wilshire Boulevard, Los Angeles

SAMUEL A. DURR, M. D., *Vice-Chairman*
1304 Medico-Dental Building
233 A Street, San Diego

J. ROY JONES, M. D., *Secretary*
2138 Third Avenue, Sacramento

First Meeting—Tower Room
Wednesday, April 26, 8:30 to 11:30 a. m.

21. *Neurootologic Studies in Epilepsy*—E. E. Langdon, M. D., Santa Monica.

Examination of the ear mechanism of thirty-five cases of idiopathic epilepsy by the turning chair tests and caloric tests. All cases having a complete neurologic and general physical examination previous to the tests, and all those showing a positive Wassermann, or having a Jacksonian type of epilepsy or giving a history of head injury were excluded from this series.

Discussion by Samuel D. Ingham, M. D., Los Angeles, and Howard C. Naffziger, M. D., San Francisco.

22. *Inadequate Nasal Respiration and Corrective Measures*—George W. Walker, M. D., Fresno.

Author thinks straightening of deflected septum too often insufficiently done and perforation too frequently a result. Suggests that placing initial cut in front of mucocutaneous junction, greater care and deliberation in dissection, will give better results. Turbinate care advised. Operation in Ozena and new method of dealing with adhesions mentioned.

Discussion by Frank E. Detling, M. D., Los Angeles.

23. *The Present Status of Sinus Therapy*—Andrew B. Wessels, M. D., San Diego.

Description and attempt to evaluate the present-day methods in the treatment of sinus pathology. The importance of thorough diagnosis, with special reference to accurate roentgen-ray interpretation, will be considered. Where surgery is required for more than simple drainage, operative interference should be "complete." Description of modern surgical procedures.

24. *Sinus Disease in Children*—Rea E. Ashley, M. D., San Francisco.

In this paper we discuss our conception of sinus disease in children. The discussion will include mention of the present day wave of enthusiasm among the laity, regarding this disease. The etiology, signs and symptoms, the diagnosis and treatment, with special reference to local treatment, will also be included.

Discussion by Chester H. Bowers, M. D., Los Angeles.

25. *The Present Status of Facial Nerve Surgery*—Robert C. Martin, M. D., San Francisco.

The recent interest in facial nerve surgery has been widespread. Direct suture and nerve grafts have been successfully used. Ballance and Deual are so enthusiastic that incomplete results are published and the dangers of the operation are so ignored that much damage will probably result from too much operating. When to operate. Suture vs. grafting. Dangers of operation: meningitis, serous labyrinthitis. Probable per cent of success will not be as high as the suture advocates state.

Discussion by O. W. Jones, M. D., San Francisco.

Second Meeting—Tower Room
Thursday, April 27, 8:30 to 11:30 a. m.

26. *Retinal Glioma Treated by Radium Therapy*—Hans Barkan, M. D., San Francisco.

Case of a two-year-old child whose right eye was enucleated with the diagnosis of intraocular glioma and glaucoma. The left eye had a glioma in the upper temporal quadrant. Radiation behind the eye with a specially constructed container, has, for a period of eight months, resulted in some regression of the growth.

Discussion by R. R. Newell, M. D., San Francisco.

27. *Optometry in the University of California*—Milton H. Shutes, M. D., Oakland.

This paper is concerned with optometry only as it exists at the University of California at Berkeley. If, for any good reason, there is a place in the future practice of medicine for optometry, then the optometry curriculum in the department of physics would seem to offer a proper contact for ophthalmology.

Discussion by Joseph L. McCool, M. D., San Francisco.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

28. *Intranasal Tear Sac Operation*—Edwin S. Budge, M. D., Los Angeles.

Any treatment or operation devised for the relief or cure of dacryocystitis to be commendable must be one which will not only relieve and prevent the recurrence of the infection, but it

must do away with that ever present and annoying disturbance, epiphora. The Pollyak intranasal operation, one similar to the so-called "West," meets this requirement.

Discussion by A. R. Irvine, M. D., Los Angeles.

29. *Uniocular Conjunctivitis from Peat Dust*—Barton J. Powell, Jr., M. D., Stockton.

Uniocular conjunctivitis which is indigenous to the San Joaquin River Delta. A résumé of the geographic and geological conditions of this territory is described in furthering the etiology. Series of over one hundred cases presented. Exciting cause is evidently direct irritation by peat dust. Several theories enumerated why this conjunctivitis is always unilateral. No positive proof given.

Discussion by Dewey R. Powell, M. D., Stockton.

30. *Technique of Differential Diagnosis in Quantitative Perimetry*—Clifford B. Walker, M. D., Los Angeles.

Brief demonstration of technique of quantitative perimetry such as can be actually accomplished in practical office and hospital routine in a reasonable length of time. This demonstration will be followed by lantern slide exhibits of as many different field conditions as can be shown in the time allowed.

Discussion by George N. Hosford, M. D., San Francisco.

IV

GENERAL MEDICINE SECTION

R. Manning Clarke, M. D., *Chairman*
1219 Hollingsworth Building
606 South Hill Street, Los Angeles

Fred H. Kruse, M. D., *Secretary*
916 Fitzhugh Building, 384 Post Street
San Francisco

First Meeting—Auditorium
Monday, April 24, 2 to 5 p. m.

31. *Chairman's Address*—R. Manning Clarke, M. D., Los Angeles.

32. *Toxic Encephalitis and Myelitis Secondary to Intravenous Arsphenamin—Case Reports and Treatment*—Carlyle P. Imerman, M. D., Hollywood.

A decrease in the high mortality (approximately 98 per cent) may be accomplished by medical and surgical measures directed toward the reduction of acute intracranial and intraspinal pressure, in conjunction with the present accepted therapy. Patient with a toxic encephalitis completely recovered. Early diagnosis and treatment paramount.

Discussion by Mark A. Glaser, M. D., Los Angeles, and H. W. Newman, M. D., San Francisco.

33. *The Treatment of Central Nervous System Syphilis with Hyperpyrexia Produced by Diathermy*—Wilfred F. Beerman, M. D., Mervyn H. Hirschfeld, M. D., Norman N. Epstein, M. D., S. Barre Paul, M. D., and Leroy Gay, M. D., San Francisco.

The use of hyperpyrexia produced by diathermy as an adjunct in the treatment of syphilis has been employed at Mount Zion Hospital, San Francisco, for the past two and a half years. The results obtained in a group of patients with various types of central nervous system syphilis are reported. The technique of the method is described. Lantern-slide demonstration.

Discussion by Milton Lennon, M. D., San Francisco.

34. *Chronic Carbon Monoxid Poisoning—A Present-Day Hazard*—Paul Michael, M. D., Oakland.

From the department of experimental pathology, University of California. Brief review and discussion of literature. Laboratory and clinical studies of the following hazards: smoking-rooms, ferryboats, garages, transportation bus lines, street traffic, vehicular tunnels, and aviation. Animal experimental work on immunity to infection in relation to lowering immunity following gas poisoning.

Discussion by Gertrude Moore, M. D., and Norman Leet, M. D., Oakland.

35. *Clinical Amebiasis in California*—Alfred C. Reed, M. D., San Francisco.

A summary of 283 cases of amebiasis with special reference to incidence in California, clinical picture and treatment. A group of cases resistant to treatment is discussed.

Discussion by F. F. Gundrum, M. D., Sacramento, and John V. Barrow, M. D., Los Angeles.

Second Meeting—Auditorium
Tuesday, April 25, 8:30 to 11:30 a. m.

36. *The Use of Glycin in the Treatment of Myasthenia Gravis*—Earl O. G. Schmitt, M. D., San Jose.

Case reports of two patients with myasthenia gravis recently treated by oral administration of the amino-acid glycin (glycocoll) with good results. The report embodies a résumé of the employment of the feeding of amino-acids in various muscular dystrophies. (Lantern slides.)

Discussion by Walter F. Schaller, M. D., San Francisco, and Albert H. Rowe, M. D., Oakland.

37. *Newer Aspects of Mineral Metabolism and Deficiency Diseases*—Carl L. A. Schmidt, M. D., Berkeley. (By invitation.)

Brief discussion of the newer knowledge appertaining to the chemistry of the vitamins, such as the relation of vitamin A to carotinoid pigment and the method employed by the body for conversion of the latter into the former, as well as the relation of vitamin C to hexuronic acid and the relation of that substance to oxidations and reductions in the body. Proper use and administration of the vitamins. Newer aspects of mineral metabolism, especially that relating to calcium and phosphorus, and the relation of vitamin D and parathyroid hormone thereto. Question of hypo- and hyperfunction of the various endocrine glands and the bearing of this subject to pathological conditions. Relation of the vitamins to dentition and the relation of the physician to this subject.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

38. *Certain Clinical Aspects of Bone-Salt Metabolism*—Francis Scott Smyth, M. D., San Francisco.

Bone is a labile organ of the body subject to various factors of destruction and repair. The laboratory has given us considerable information, but clinical enthusiasm has frequently advanced beyond the point of laboratory proof. Importance of stressing consideration of factors of absorption and excretion and danger of unbalanced therapy.

39. *The Clinical Control of Calcium Metabolism*—Fletcher B. Taylor, M. D., Oakland.

Two case studies will be given on lantern slides: (1) Adult tetany relieved by medical measures. (2) Negative calcium balance changed to positive calcium balance in an adult with rarefied bones. A diagram showing various factors which influence calcium metabolism will be shown. Sources of calcium and therapeutic aids will be discussed. Also therapeutic dangers, safeguards, and costs will be considered.

Discussion of symposium by Leon Goldman, M. D., San Francisco (by invitation); James W. Sherrill, M. D., La Jolla; Leonard Barnard,

M. D., Oakland; and David M. Greenburg, M. D., San Francisco (by invitation).

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Third Meeting—Auditorium
Joint meeting of Pathology and Bacteriology and General Medicine Sections
Wednesday, April 26, 8:30 to 11:30 a. m.

40. *The Neutropenic State—*
    (a) *Hematological Aspects*—Madeleine Fallon, M. D., University of Minnesota. (By invitation.)
    (b) *Medical Aspects*—B. O. Raulston, M. D., Los Angeles.

41. *The Anemias—The Use of Iron in Treatment*—Cyrus C. Sturgis, M. D., University of Michigan, Ann Arbor. (By invitation.)
    It is essential before the application of any therapeutic measures in the treatment of the anemias to determine accurately the exact type of blood dyscrasia from which a patient is suffering. A practical classification of the anemias will be considered briefly and those benefited by iron medication will be emphasized. The use of iron will be discussed from the standpoint of preparations, mode of administration, absorption, action, and the general metabolism of the substance in the body.

42. *Chronic Idiopathic Hypochromic Anemia—Clinical Aspects with Special Reference to the Relationship of Diet and Nutrition to Anemia*—Stacy R. Mettier, M. D., San Francisco; Frederick Kellogg, M. D., San Francisco, and James F. Rinehart, M. D., San Francisco.
    This paper consists of a presentation of the clinical manifestations of a condition characterized by achlorhydria and an anemia of low color index. This condition is known in the medical literature variously as "hypochromic anemia," "microcytic anemia," and "chronic chlorosis." A preliminary report on an investigation concerning the effect of a diet rich in iron and also of large doses of iron on blood formation is given. In addition, some experimental work concerning the probable rôle of the abnormality of the gastro-intestinal tract in the defect in blood formation will be discussed.

43. *The Anemia of Gastric Cancer—Its Response to Therapy*—Garnett Cheney, M. D., San Francisco.
    Theoretical considerations of the cause of the anemia. Exact mechanism unknown; characteristics of the anemia. Response of red blood cells, hemoglobin, and reticulocytes to combined liver extract and iron therapy. Changes in red cell size. Comments on clinical improvement. Charts.
    Discussion on symposium by Madison J. Keeney, M. D., Los Angeles; Ernest Falconer, M. D., San Francisco; Madeleine Fallon, M. D., Minnesota; William H. Barrow, M. D., San Diego; George A. Gray, M. D., San Jose; William Bender, M. D., San Francisco; and Walter W. Boardman, M. D., San Francisco.

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Fourth Meeting—Auditorium
Thursday, April 27, 8:30 to 11:30 a. m.

44. *Hypoglycemia and Hyperinsulinism*—Milo K. Tedstrom, M. D., Anaheim.
    Hypoglycemia defined. Classification of hypoglycemia on basis of etiology. Brief discussion of blood sugar regulatory mechanism. Summary of symptoms and pathology of reported cases. Report of two cases of hypoglycemia under personal observation. Summary of treatment with special reference to hypoglycemia induced by hyperinsulinism.
    Discussion by Roland Cummings, M. D., Los Angeles, and J. M. Nielsen, M. D., Los Angeles.

45. *Insulin Fattening in the Ambulatory Patient*—H. Clare Shepardson, M. D., San Francisco.
    A brief résumé of the literature pertaining to the use of insulin in malnutrition. The effects produced by insulin on the patient and his metabolism, and the limitations of such therapy are discussed. Finally a consideration of the results obtained in the use of insulin to increase weight in twenty individuals of the constitutionally slender type.
    Discussion by Bertnard Smith, M. D., Los Angeles, and F. M. Pottenger, M. D., Monrovia.

46. *Pulmonary Arteriosclerosis*—William J. Kerr, M. D., San Francisco, and Francis J. Rochex, M. D., San Francisco.
    Pulmonary arteriosclerosis has been described in association with syphilis and with a variety of conditions where there is an increase in pressure in the pulmonary circulation. Clinical symptoms, such as cyanosis and dyspnea, may be marked, and an increase in the red count and hemoglobin to the proportion of polycythemia may occur. Increased pulmonic second sound, pulsation of the interspaces, and movement of the diaphragm with beat of the heart are described. Clinical and roentgenographic findings will be co-related with the pathological findings.
    Discussion by John C. Ruddock, M. D., Los Angeles, and Robert S. Stone, M. D., San Francisco.

47. *A Comparative Study of the Effects of Insulin-Free Pancreatic Extract and the Circulatory Hormone (Kallikrein of Frey and Kraut) on Angina Pectoris*—Franklin R. Nuzum, M. D., Santa Barbara, and A. H. Elliott, M. D., Santa Barbara.
    Physiologic and pharmacologic properties of these substances. Similarities and differences, with particular reference to their effects upon the coronary flow of the perfused heart. A clinical evaluation of their application in the treatment of angina pectoris. The circulatory hormone appears to be ineffective, while the extract of pancreas is of definite value.
    Discussion by Hilmar O. Koefod, M. D., Santa Barbara, and Hans Lisser, M. D., San Francisco.

48. *Pregnancy as a Complication of Heart Disease*—Ina M. Richter, M. D., Santa Barbara, and John F. Rickard, M. D., San Francisco.
    Pregnancy to be considered as a complication of an already existing cardiac condition and a study made of its influence on the cardiac condition. Relation of cardiac condition to fetus. Change in character and position of murmur from examination to examination with advance of pregnancy.
    Discussion by Irving H. Betts, M. D., Visalia, and Alice Maxwell, M. D., San Francisco.

V

GENERAL SURGERY SECTION

HAROLD BRUNN, M. D., *Chairman*
1001 Fitzhugh Building
384 Post Street, San Francisco

E. ERIC LARSON, M. D., *Secretary*
310 Wilshire Medical Building
1930 Wilshire Boulevard, Los Angeles

EDWIN M. TAYLOR, M. D., *Assistant Secretary*
230 Grand Avenue, Oakland

First Meeting—Bali Room
Monday, April 24, 2 to 5 p. m.

49. *Chairman's Address*—Harold Brunn, M. D., San Francisco.

50. *The Viscerospinal Syndrome—A Confusing Factor in Surgical Diagnosis*—Irving Wills, M. D., and Rodney F. Atsatt, M. D., Santa Barbara.
    Lumbar myositis (from strain or infection) with radiculitis may give signs and symptoms

simulating surgical abdomen. Pain (sometimes colicky in nature), nausea, vomiting, abdominal rigidity, and temperature may be confused with ureteral stone, appendicitis, intestinal obstruction, or perinephritic abscesses, in diagnosis. Case reports.

Discussion by John B. Doyle, M. D., Los Angeles, and Emmet Rixford, M. D., San Francisco.

51. *The Control of Pain in Pregangrenous Arteriosclerotic and Thromboangitic Ischemia* — Frederick Leet Reichert, M. D., San Francisco.

Although the ischemia in the extremities of patients suffering from arteriosclerosis or thromboangitis is a local manifestation of a generalized pathologic process, yet it can be definitely improved and the pain associated with it relieved by interruption of the sympathetic pathways to the affected limb by alcoholic injections.

Discussion by Steele F. Stewart, M. D., Los Angeles, and Edward B. Towne, M. D., San Francisco.

52. *Bile Peritonitis*—Stanley H. Mentzer, M. D., San Francisco.

The toxicity of bile peritonitis arises from undetermined sources. Clinically and experimentally small doses of bile frequently produce a fatal peritonitis, yet on occasion the abdomen may contain many liters of bile, without serious consequences. The mechanism of this phenomenon is discussed, and the author presents several illustrative cases.

Discussion by Harlan Shoemaker, M. D., Los Angeles, and Alanson Weeks, M. D., San Francisco.

53. *The Z-Plastic Operation in Reconstructive Surgery of the Extremities*—Hugh Toland Jones, M. D., Los Angeles.

This is a procedure that serves in a number of ways in the relief of scar contractures. In carefully selected cases it has been found useful in the relief of certain contractures of the axilla, of the fingers and thumb, and of contracture binding the dorsum of the foot to the shin.

Discussion by Harold E. Crowe, M. D., Los Angeles, and Sylvan L. Haas, M. D., San Francisco.

54. *Reconstruction of the Burned Face* — Howard L. Updegraff, M. D., Hollywood.

Reconstruction of the burned face may be aided materially by surgery, x-ray therapy, glandular medication, and in some cases bacteriophage. A single-flap tube may be waltzed as many times as desired over a burned face, leaving as much tissue as necessary at any given area. The treatment of keloids has materially advanced in the discovery that the majority of keloidal cases have a lowered basal metabolism. (Motion picture illustration.)

Discussion by Clarence C. Reed, M.D., Hynes, and Sterling Bunnell, M. D., San Francisco.

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Second Meeting—Bali Room

Joint Meeting of Radiology and General Surgery Sections

Tuesday, April 25, 8:30 to 11:30 a. m.

SYMPOSIUM ON LESIONS OF THE COLON

55. *The Roentgenological Diagnosis of Nonmalignant Lesions of the Colon*—Ray G. Taylor, M. D., Los Angeles.

The following conditions will be briefly considered with reference to roentgenological evidence and differential diagnosis and will be illustrated by appropriate lantern slides: anomalies, spasm, adhesions, adventitious bands, tuberculosis, colitis, diverticulosis, intussusception, and polyposis.

56. *Malignant Tumors of the Colon*—Carl B. Bowen, M. D., Oakland.

The technical procedures involved will be outlined; also various malignant tumors will be discussed as to their location and diagnosis. The differential diagnosis will be briefly outlined and considered.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

57. *Diverticulosis and Diverticulitis of the Colon*—Verne C. Hunt, M. D., Los Angeles.

A general statement regarding incidence and pathology of diverticulosis and diverticulitis of the colon; the clinical significance of diverticulosis; factors concerned with the advent of diverticulitis; consideration of clinical manifestations of diverticulitis, its complications and surgical indications; principles involved in the surgical procedures.

58. *Malignant Diseases of the Colon*—Harvey B. Stone, M. D., Baltimore, Maryland. (By invitation.)

Diagnosis in the right and left side of the colon as concerns malignant growth. Radical operation. Palliative treatment.

Discussion of symposium by Kenneth S. Davis, M. D., Los Angeles; Robert R. Newell, M. D., San Francisco; Leo Eloesser, M. D., San Francisco; Fred R. Fairchild, M. D., Woodland; and Clarence G. Toland, M. D., Los Angeles.

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Third Meeting—Bali Room

Wednesday, April 26, 8:30 to 11:30 a. m.

59. *Diagnosis and Treatment of Subphrenic Abscess*—Howard W. Stephens, M. D., and Elliott Rouff, M. D., San Francisco.

The cases of subphrenic abscess at the University of California and San Francisco Hospitals during the past ten years are critically reviewed, to bring out helpful points in diagnosis and associated complications. Operative procedures are then detailed to demonstrate the best approach to the abscess, depending on its anatomical location.

Discussion by G. Lawrence Chaffin, M. D., Los Angeles, and Dexter N. Richards, M. D., Oakland.

60. *Experimental Gastro-Intestinal Anastomosis—Its Effect on the Secretory and Motor Functions of the Stomach* — Harold L. Thompson, M. D., Los Angeles.

Standard forms of gastro-intestinal anastomosis, used in the surgical treatment of peptic ulcer, were performed on normal stomachs of dogs. The effects of operation on the secretory and motor functions of the stomach were observed by fractional analysis of gastric content; the emptying time of the stomach was observed roentgenologically.

Discussion by Rea Smith, M. D., Los Angeles, and Asa W. Collins, M. D., San Francisco.

61. *Cancer of the Stomach* — John Homer Woolsey, M. D., San Francisco.

An analytical survey of the cases treated personally, with emphasis upon the reasons for late consultation with physicians and delay in proper treatment; a consideration of earlier diagnosis; what the conduct and care of such a condition would be, and the results of treatment.

Discussion by Wayland A. Morrison, M. D., Los Angeles, and Emile F. Holman, M. D., San Francisco.

62. *Advances in the Treatment of Anorectal Fistula*—Montague S. Woolf, M. D., San Francisco.

Abscess formation precedes the majority of all fistulae. The anatomic arrangements of these abscesses is the basis of the position of subsequent fistulae and also of their treatment. There must be no question of impairment of sphincteric control after operations for fistula.

Discussion by William H. Kiger, M. D., Los Angeles, and Kirk H. Prindle, M. D., San Mateo.

63. *Deoxygenation—A Cause of Infection*—C. Van Zwalenburg, M. D., Riverside.

In appendicitis, intestinal obstruction and abscess, with hydraulic pressure—"hydraulic vicious circle"—closes the veins and capillaries, causing congestion and asphyxiation. The tissues thus deprived of oxygen become easy prey to anaërobic bacteria which grow and cause infection, necrosis and gangrene. Blood carrying the normal amount of oxygen prevents infection and overcomes it when present. Illustrated with a motion-picture film exhibiting the mechanics of acute appendicitis.

Discussion by LeRoy Brooks, M. D., San Francisco, and Francis L. Anton, M. D., Los Angeles.

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Fourth Meeting—Bali Room

Thursday, April 27, 8:30 to 11:30 a. m.

64. *Encephalography—Its Diagnostic and Therapeutic Value*—Mark Albert Glaser, M. D., Los Angeles.

Encephalography is of therapeutic and diagnostic value. The ventricles and subarachnoid spaces are outlined, thus visualizing abnormalities caused by brain tumors, epilepsy, insanity, birth injuries, and hydrocephalus. Troublesome post-traumatic headaches are relieved in some patients, and epileptic seizures may frequently be diminished or temporarily relieved.

Discussion by George H. Patterson, M. D., Los Angeles, and O. W. Jones, Jr., M. D., San Francisco.

65. *Osteomyelitis—A Clinical and Experimental Study*—Keene O. Haldeman, M. D., San Francisco.

The clinical pictures of chronic and acute infections of bone are explained on the basis of microscopic studies made on specimens removed surgically and at autopsy. A series of experimental osteomyelitis cases in rabbits completes the pathologic story from the onset of infection until chronicity is established. The relationship of pathologic observation to surgical practice is discussed.

Discussion by H. W. Spiers, M. D., Los Angeles, and George H. Sanderson, M. D., Stockton.

66. *Treatment of Fracture of the Os Calcis*—Lionel D. Prince, M. D., San Francisco.

Discussion of mechanics of injury and resultant pathology and deformity. Methods of treatment with special reference to the Boehler pintraction method of reduction. A report of seventeen consecutive cases with comparative study of end-results, illustrated with lantern slides.

Discussion by A. E. Gallant, M. D., Los Angeles, and Edward C. Bull, M. D., San Francisco.

67. *Rolling-Pin Method of Reducing Fractures of the Wrist*—William Arthur Clark, M. D., Pasadena.

Direct pressure better than leverage and extension for reducing distal fragment of radius. Operator's fingers and thumbs too soft to push a hard, bony fragment. Direct pressure must be made first at the proximal edge of the distal fragment, not at a right angle, but as much longitudinally as possible. Best done with a small, wooden rolling-pin, applied to the posterior cortex and rolled down over the distal fragment. Final pressure at right angles.

Discussion by John Dunlop, M. D., Pasadena, and William F. Holcomb, M. D., Oakland.

68. *Improved Siphon System for Maintaining Continuous Drainage in Thoracic Empyema, or Intermittent Drainage in the Presence of Bronchofistula*—F. M. Pottenger, M. D., Jr., Monrovia.

A siphon system unaffected by bronchofistula or other sources of gas suitable for draining thoracic empyema or infections of any body cavity. The operation and physics will be described and illustrated by lantern slides. A short report of cases treated will also be given.

Discussion by Harry Glenn Bell, M. D., San Francisco, and Frank Stephen Dolley, M. D., Los Angeles.

VI

INDUSTRIAL MEDICINE AND SURGERY SECTION

JOHN N. OSBURN, M. D., *Chairman*
1010 Pacific Mutual Building
523 West Sixth Street, Los Angeles

WILLIAM S. KISKADDEN, M. D., *Secretary*
Wilshire Medical Building
1930 Wilshire Boulevard, Los Angeles

First Meeting—Private Dining Room

Wednesday, April 26, 8:30 to 11:30 a. m.

69. *Management of Flaps and Reconstructive Surgery*—Gerald Brown O'Connor, M. D., San Francisco.

Relative methods of flaps from point of view of their donor and recipient. Selectivity. Discussion of author's methods for obtaining grafts; operative application; preoperative care. (Lantern slides.)

Discussion by W. L. Miles, M. D., Los Angeles, and George Warren Pierce, M. D., San Francisco.

70. *Nonunion of Fractures*—C. Lewis Gaulden, M. D., Los Angeles.

Etiology. Bones most frequently affected. Treatment. (Lantern slides.)

Discussion by John Wilson, M. D., Los Angeles, and Samuel S. Mathews, M. D., Los Angeles.

71. *Functional Anatomy of the Knee Joint*—John B. de C. M. Saunders, F. R. C. S. (Edin.), Berkeley. (By invitation.)

The nature of the articular surfaces. Incongruity of articular surfaces as a principle of diarthrodial joints. The ligaments—Hilton's Law. The collateral ligaments. The semilunar cartilages. McConnaill's theory of action as Mitchell pads. The mechanisms of their injury. Periarticular fat and synovia, its function and relationship to injuries.

72. *Fracture of the Tarsal Scaphoid*—J. Minton Meherin, M. D., San Francisco.

Incidence; types; methods of treatment including operative procedure. End-results. (Lantern slides.)

Discussion by Ralph Soto-Hall, M. D., San Francisco, and George Sanderson, M. D., Stockton.

73. *Newer Aspects of the Practice of Physical Therapy*—Shown by John Severy Hibben, M. D., Pasadena.

Résumé: Progress in physical therapy includes educational scientific research, hyperpyrexia by radiotherapy, electrosurgery, evaluation of ultraviolet light therapy and indications for the use of physical therapy by industrial surgeons, illustrated by motion pictures. Discussion by Leslie Langnecker, M. D., San Francisco, and H. M. F. Behneman, M. D., San Francisco.

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Second Meeting—Children's Play Room No. 1

Thursday, April 27, 8:30 to 11:30 a. m.

74. *Traumatic Rupture of the Bowel and Urinary Bladder*
Edmund Butler, M. D., San Francisco.

Diagnosis: Early signs and symptoms; late signs and symptoms; misleading findings. Treatment: early before peritonitis is generally established; after peritonitis is well established; treatment when it is impossible to operate.

Discussion by Alanson Weeks, M. D., San Francisco, and Wallace Dodge, M. D., Los Angeles.

75. *Surgical Treatment of Compression Fractures of the Vertebra*—John Dunlop, M. D., Pasadena.

Author's method of obtaining hyperextension and fixation of the spine. Comparison with other methods in use. (Lantern slides.)

Discussion by J. J. Loutzenheiser, M. D., San Francisco; Leroy Abbott, M. D., San Francisco; and J. W. Shilling, M. D., Los Angeles.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

76. *Symposium on Industrial Poisonings.*
   1. Carbon monoxid poisoning—Robert T. Legge, M. D., Berkeley.
   2. Lead poisoning—Roy W. Hammack, M. D., Los Angeles.
   3. Carbon tetrachloride poisoning — Verne R. Mason, M. D., Los Angeles.
   4. Pneumonoconiosis — Paul A. Quaintance, M. D., Los Angeles.

   Discussion of symposium by Chauncey D. Leake, Ph. D., San Francisco, and Eugene S. Kilgore, M. D., San Francisco.

VII

NEUROPSYCHIATRY SECTION

CHARLES L. ALLEN, M. D., *Chairman*
Pacific Mutual Building
523 West Sixth Street, Los Angeles

H. DOUGLAS EATON, M. D., *Secretary*
Medical Office Building
1136 West Sixth Street, Los Angeles

First Meeting—Club Room
Wednesday, April 26, 8:30 to 11:30 a. m.

77. *Chairman's Address*—Charles Lewis Allen, M. D., Los Angeles.

78. *Lumbar Puncture in Intracranial Pressure*—Walter F. Schaller, M. D., San Francisco.

   Personal experiences and experimental cerebrospinal hydrodynamics indicate a diagnostic rachicentesis to be a safe procedure when done according to a strictly defined technique.

   Discussion by Edward B. Towne, M. D., San Francisco.

79. *Hemiplegia and Death Following Temporary Interruption of the Cerebral Circulation*—Thomas G. Inman, M. D., and F. C. Stewart, M. D., San Francisco.

   The clinical history and autopsy report in a case of hemiplegia which followed a rapid fall in blood pressure. The symptoms and clinical findings pointed to a thrombosis of a cerebral vessel, but at autopsy no evidence of vessel occlusion could be found. Comments on prevention, diagnosis, and treatment of cerebral arteriosclerosis.

   Discussion by Walter F. Schaller, M. D., San Francisco.

80. *The Coördinating Mechanisms of the Brain and Spinal Cord*—Samuel D. Ingham, M. D., Los Angeles.

   The coördinating function of certain centers in the brain stem and spinal cord has never been sufficiently stressed or given very much clinical application. A careful review seems to show that a direct connection of the pyramidal tract with the anterior horn cells and the motor cranial nerve nuclei has never been demonstrated. On the other hand it seems that the pyramidal tract connects directly with the above mentioned coördinating mechanisms in the brain stem and spinal cord. The physiology and the clinical application of these mechanisms are presented.

Second Meeting—Club Room
Thursday, April 27, 8:30 to 11:30 a. m.

81. *Migraine*—Victor L. Mann, M. D., Los Angeles.

   The migraine equivalent affects about eight per cent of the people. It stimulates other conditions, causes errors in diagnosis and inappropriate treatment, thus contributing to an incredible percentage of psychoneurotics. Its extensive effects, its hereditary nature, its relationship to epilepsy and allergy are accounted for on the basis of its endocrino-vegetative metabolic origin.

   Discussion by Samuel D. Ingham, M. D., Los Angeles.

82. *Chemical and Physiological Reactions of the Body to Hyperpyrexia Baths and Their Significance in the Epileptic Syndrome*—Helen Hopkins, M. D., Los Angeles.

   Chemical and physiological responses to hyperpyrexia induced by hot baths.

   Blood chemical analyses reveal states of alkalosis, anoxemia, hydremia, hypoglycemia, falling diffusible serum calcium and rising serum phosphorus within the body, changes having direct activating influence upon convulsive tendency. Respiratory, cardiac and vascular changes have additional effect upon activity of nervous elements.

   Patients presenting epileptic syndrome not in constant state of susceptibility to convulsions. During inactive phases induction of seizures not always accomplished even in presence of well established chemical and physiological alterations favoring appearance.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

83. *Commitment Laws in California and Elsewhere*—Glenn Myers, M. D., Los Angeles.

   Hospital care of mentally ill patient often deprives patient of his liberty. Necessary to safeguard patient's legal rights. A questionnaire has disclosed that most foreign countries facilitate admission of mental patients to institutions. Comparison of proceedings in United States and foreign countries. Data and discussion of most desirable features in a commitment law.

   Discussion by Herman Adler, M. D., San Francisco.

84. *Post-Traumatic Sequelæ, with Special Reference to Convulsive States*—Frederick P. Shafer, M. D., Los Angeles.

   Analysis of three hundred cases with review of literature to determine late effects of a head injury. After acute effects subside, disabling sequelæ often arise. Convulsive states exist in about six per cent, divided into three groups: focal epilepsy, hystero-epilepsy, and true traumatic epilepsy. Differentiation of hystero- from the true post-traumatic epilepsies. Analysis of other symptoms and neurological signs will be considered. Vestibular tests and value of encephalography.

   Discussion by Mark Glaser, M.D., Los Angeles.

VIII

OBSTETRICS AND GYNECOLOGY SECTION

EDMOND M. LAZARD, M. D., *Chairman*
Wilshire Medical Building
1930 Wilshire Boulevard, Los Angeles

EMIL J. KRAHULIK, M. D., *Secretary*
Taft Building
1680 North Vine Street, Los Angeles

First Meeting—Copper Cup Room
Monday, April 24, 2 to 5 p. m.

85. *The Problem of Dysmenorrhea*—L. A. Emge, M. D., San Francisco.

   Discussion of various types of dysmenorrhea with particular emphasis on their relation to the endocrine apparatus. Further discussion will deal with types of dysmenorrhea, explainable on a constitutional, psychogenic, endocrine and mechanical basis. The new aspects of treatment of the various types will form the conclusion of the discussion.

86. *Ectopic Pregnancy*—Leon J. Tiber, M. D., Los Angeles.

Discussion of two hundred cases treated at the Los Angeles County General Hospital. Symptomatology, diagnosis, findings, and time of operation will be analyzed.

Relation of morbidity and mortality to the time of operation, and to the type of transfusion used. Special emphasis directed to the results obtained with autotransfusion.

87. *The Extraperitoneal Cesarean Section, Using the Method of Latzko*—Abraham Bernstein, M. D., and Louis I. Breitstein, M. D., San Francisco.

Latzko cesarean section is the true extraperitoneal operation, and lessens incidence, morbidity, and mortality rate. May be performed after repeated vaginal examinations or attempted forceps. A well-developed lower uterine segment is a prerequisite for operation. Operation should be performed only in potentially infected cases, after a full test of labor, and avoided in frankly infected cases. (Lantern slides.)

88. *Relation of the Curability of Cervical Cancer and the Duration of Symptoms*—Daniel G. Morton, M. D., San Francisco.

Analysis of 167 cases of cervical cancer showed that only 21 per cent had had symptoms of two months or less. Regardless of the stage of advancement, 45 per cent of this small group survived for more than five years. This is in marked contrast to the 20 per cent cure obtained for the entire series, and emphasizes graphically the importance of warning symptoms. Shows the possibilities of cures with present methods. The necessity for excluding cancer in all cases of bleeding is illustrated, as is the need for public education.

89. *A New Vaginal Retractor*—Henry L. White, M. D., Red Bluff.

Demonstration of a self-retaining, operating retractor. This retractor has been used for nearly five years, by the author, in the following operations: anterior colporrhaphies, resections of the cervix, placing of radium, and dilatations and curettements.

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Second Meeting—Copper Cup Room
Tuesday, April 25, 8:30 to 11:30 a. m.

90. *Chairman's Address—Porro Cesarean Section*—Edmond M. Lazard, M. D., Los Angeles.

Definition. History of Porro cesarean section. Modernized technique of this operation. Indications. Analysis of cases. Results: (1) mortality, (2) morbidity. Consideration of advisability of elective Porro for purpose of sterilization.

91. *Termination of Pregnancy in Eclampsia*—Donald G. Tollefson, M. D., Los Angeles.

The question of terminating pregnancy in toxemic patients depends on parity, period of gestation, and their response to conservative treatment. After onset of convulsions, consensus of opinion in favor of control of eclamptic seizures and disregard of pregnancy. While magnesium sulphate may not control convulsions, it reduces patient's surgical hazard greatly. In primiparous patients, even without obstetrical indications, cesarean section is occasionally indicated in interest of both mother and child. Analysis of nearly five hundred convulsive and preëclamptic toxemias reveal lowered mortality from operative intervention where patient is first given benefit of conservative measures.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

92. *Cervical Dystocia*—W. Clifford McKee, M. D., Los Angeles.

Definition. Anomalies and histologic changes. Pathologic changes due to infection, cauterization, plastic operations, birth and dilatation injuries. Associated dystocias. Uterine inertia. Prognosis. Discussion of methods of treatment: expectant, bag, manual dilatation, incision, cesarean section.

93. *The Membranes in Labor*—Norman H. Williams, M. D., Los Angeles.

Influence of premature rupture of membranes—spontaneous and artificial. Membranes may be obstructive in labor. "Dry labor" not primarily a complicated labor. Less maternal injury in early rupture of the membranes. Infant injuries not increased in "dry labor." Comparison of cases in which membranes (1) rupture late in labor, (2) rupture spontaneously early in labor, and (3) ruptured artificially early in labor.

94. *The Management of Diabetes in Pregnancy*—James W. Sherrill, M. D., La Jolla.

Incidence of diabetes and pregnancy. Infrequency of conception before the advent of insulin. Occurrence of glycosuria and atypical reducing substances during pregnancy. Importance of classifying glycosurias. Changes in carbohydrate tolerance and insulin dosage associated with pregnancy. Incidence of heredity. Sociological aspects. Report of cases.

IX

PATHOLOGY AND BACTERIOLOGY SECTION*

FREDERICK PROESCHER, M. D., *Chairman*
Santa Clara County Hospital, San Jose
GEORGE D. MANER, M. D., *Secretary*
Wilshire Medical Building
1930 Wilshire Boulevard, Los Angeles
ELMER W. SMITH, M. D., *Assistant Secretary*
2200 Hayes Street, San Francisco

First Meeting—Children's Play Room No. 2
Monday, April 24, 2 to 5 p. m.

95. *Chairman's Address*—Frederick Proescher, M. D., San Jose.

96. *Round Table Discussion—Pathology of Encephalitis*—R. M. Van Wart, M. D., Los Angeles; C. B. Courville, M. D., Los Angeles; Frederick Proescher, M. D., San Jose, and Charles E. Nixon, M. D., Fresno.

96a. *Experimental Evidence of Reflex Control of the Coronary Blood Flow*—Charles M. Green, M. D., Pacific Grove. (By invitation.)

97. *Round Table Discussion—Tumor and Trauma*—Zera Bolin, M. D., San Francisco, in charge.

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Second Meeting—Children's Play Room No. 2
Tuesday, April 25, 8:30 to 11:30 a. m.

98. *Round Table Discussion on Psittacosis*—Karl Meyer, Ph. D., San Francisco; J. B. Luckie, M. D., Pasadena, and Alvin G. Foord, M. D., Pasadena.

99. *Round Table Discussion on Bacteriophage—Its Theory and Practical Clinical Application*—Albert Krueger, M. D., Berkeley; J. F. Kessel, Ph. D., Los Angeles, and J. Homer Woolsey, M. D., San Francisco.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

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Third Meeting—Auditorium
Joint Meeting of General Medicine with Pathology and Bacteriology Section
Wednesday, April 26, 8:30 to 11:30 a. m.

The program of this joint meeting is printed under the third meeting of the General Medicine Section.

* The Section on Pathology and Bacteriology presents no formal papers. All meetings are round table discussions. Section rule Number 7, concerning synopses, therefore does not apply.

X

PEDIATRIC SECTION

WILLIAM M. HAPP, M. D., *Chairman*
919 Pacific Mutual Building
523 West Sixth Street, Los Angeles
HENRY E. STAFFORD, M. D., *Secretary*
242 Moss Avenue, Oakland

First Meeting—Copper Cup Room
Wednesday, April 26, 8:30 to 11:30 a. m.

SYMPOSIUM ON ALLERGY

100. *Introduction—Chemical Basis of Allergy*—Hobart Rogers, M. D., Oakland.

Experimental investigation of immunity and anaphylaxis has defined certain chemical attributes of antigens and antibodies. Plausible speculations are advanced regarding phenomena dependent on their interaction. Study of human hypersensitiveness indicates general resemblances but also specific differences best explained by assuming a peculiar protoplasmic constitution in affected individuals.

101. *Eczema in Infancy and Childhood*—H. J. Templeton, M. D., and V. G. Alderson, M. D., Oakland.

Solution of problem demands coöperation of dermatologist, pediatrician, and allergist. Infantile eczema the result of hypersensitive skin being acted upon by a noxious stimulus, either exogenous or endogenous in origin. External irritants play minor rôle. Internal irritants occasionally foci of infection, usually food allergens at fault.

Careful histories and elimination diets of first importance while scratch tests are of less practical value in locating foods at fault. Urbach's work of considerable interest.

102. *Local Treatment of Eczema*—Hiram E. Miller, M. D., San Francisco.

Local treatment varies with the type of eczema and its location. The proper remedy must be properly prepared and applied to produce satisfactory results. Lotions, wet dressing, pastes, ointments, ultraviolet light, and x-ray therapy will be discussed. Mechanical measures, hospitalization, and general care of the eczematous skin will be considered. (Lantern slides.)

103. *Asthma in Childhood*—Hyman Miller, M. D., Los Angeles.

Early recognition of asthma or potential asthma in allergic child best accomplished by clinical observation guided by the concept that asthma is but one aspect of the lifelong constitutional allergic state. Leads to early recognition, results of skin testing, function of elimination diets and prophylaxis against sequelae and complications based on information gleaned from 1411 children at the Los Angeles Children's Hospital allergy clinic and 7000 individuals seen in private and clinic practice.

104. *Some Points About the Home Management of Asthmatic Children*—William Belford, M. D., San Diego.

Some points about the care of the asthmatic child in the home are presented, mentioning the need of complete coöperation of the parents, some food problems, home environment and the importance of the inhalant group of allergens.

Discussion of symposium by Edward S. Babcock, Jr., M. D., Sacramento, and Paul Michael, M. D., Oakland.

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Second Meeting—Copper Cup Room
Thursday, April 27, 8:30 to 11:30 a. m.

105. *Chairman's Address*—William M. Happ, M. D., Los Angeles.

106. *Resistance to Eating Among Preschool Children*—Herbert R. Stolz, M. D., Berkeley.

Emphasis by pediatricians in recent medical contributions reflects the experience of many physicians who deal with the problems of child rearing, as well as with definite disease entities among children.

Discussion of results of the investigation on child resistance to eating by Institute of Child Welfare at the University of California, with special reference to types of resistance, casual factors, prevention and treatment.

Discussion after reading of 107.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

107. *The Undernourished Child*—Howard L. Eder, M. D., Santa Barbara.

Preventorium care the best treatment. Type of home only partly responsible. Change of environment big factor. Children from eight to twelve years show greatest improvement. Follow-up clinics necessary. Frequent turnovers advisable. Results obtained in 120 cases summarized. (Lantern slides.)

Discussion by Edward J. Lamb., M. D., Santa Barbara, and Randolph Flood, M. D., San Francisco.

108. *Committee Report on Communicable Disease Prevention*—Edward B. Shaw, M. D., San Francisco.

A committee on the Pediatric Section has collaborated in outlining routine directions for communicable disease prophylaxis. These directions specify indication, age, choice of immunizing material, technique, precautions and all data significant to routine procedures of prophylaxis. This outline is presented for discussion by the Section.

Discussion by Walter M. Dickie, M. D., and W. H. Kellogg, M. D., Berkeley; William Palmer Lucas, M. D., and Karl Meyer, Ph. D., San Francisco.

XI

RADIOLOGY SECTION

HENRY SNURE, M. D., *Chairman*
1501 South Figueroa Street, Los Angeles
ROBERT S. STONE, M. D., *Secretary*
University of California Hospital
San Francisco

First Meeting—Club Room
Monday, April 24, 2 to 5 p. m.

109. *Unfiltered X-Ray in Large Doses in the Treatment of Superficial Malignancies*—William H. Sargent, M. D., Oakland.

A preliminary report upon the immediate results of unfiltered x-ray in treatment of superficial malignancies. The importance of dosage. What constitutes a large dose, and those factors which may influence it, especially the port, are considered. The character of the reaction and the condition of the parts after recovery are discussed and compared with those obtained by filtered radiation. A brief survey of the conditions in which it may be used is given, with a report of several cases so treated.

Discussion by H. J. Ullmann, M. D., Santa Barbara.

110. *Treatment of Carcinoma of the Tonsils and Pharynx*—William E. Costolow, M. D., Los Angeles.

A general discussion on the malignancies of the tonsil and pharynx, describing the methods of treatment, and giving a description of the radiation technique. Also case reports of some of the cases which have been personally treated and observed.

Discussion by L. Henry Garland, M. D., San Francisco.

111. *Some Recent Developments in Radiotherapy of Cancer*—A. C. Christie, M. D., Washington, D. C. (By invitation.)

112. *Radiation Treatment of Carcinoma of the Uterus*—Lyle C. Kinney, M. D., San Diego.

The treatment of carcinoma of the cervix involves no controversy between surgery and radiology. The question properly arises as to the indications for surgery, for radiation or for the use of both. Except in the earliest cases limited to the surface of the cervix, the adnexa or glands are involved in one-third of the operable cases. Either surgery or radiation to be adequate must be directed to the elimination of carcinoma as far out as the wall of the pelvis.

Discussion by Frank W. Lynch, M. D., San Francisco.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

Report of Committee on Costs—R. R. Newell, M. D., San Francisco.

113. *The Roentgen-Ray Treatment of Carcinoma of the Breast, with Special Reference to the Inoperable Case*—John M. Rehfisch, M. D., and L. Henry Garland, M. D., San Francisco.

Statistics unreliable: (*a*) breast carcinoma protean lesion, (*b*) controls difficult, and (*c*) radiation techniques too varied. Value of conclusions from single, comparatively small series treated by one technique. Pathological theory; minimum requirements for preoperative radiation; serious dangers. Technique for practical postoperative radiation. Dangers. Results to expect. The inoperable carcinoma. Logical and humane aim used in treatment.

Discussion by William E. Costolow, M. D., Los Angeles.

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Second Meeting—Bali Room

Joint Meeting of General Surgery with Radiology Section

Tuesday, April 25, 8:30 to 11:30 a. m.

The program of this joint meeting is printed under the second meeting of the General Surgery Section.

XII

UROLOGY SECTION

JAMES C. NEGLEY, M. D., *Chairman*
Brack Shops Building
527 West Seventh Street, Los Angeles

LEWIS MICHELSON, M. D., *Secretary*
Medico-Dental Building
490 Post Street, San Francisco

First Meeting—Tower Room

Monday, April 24, 2 to 5 p. m.

114. *Chairman's Address—The Cold Quartz Ultra-Violet Ray as a Therapeutic Agent in Urology*—James C. Negley, M. D., Los Angeles.

115. *Surgical Treatment of the Doctor's Prostate*—J. G. Thompson, M. D., Rochester, Minnesota. (By invitation.)

116. *Symposium on Resection of Bladder Neck Obstruction as Performed by the Urological Staff of the Los Angeles County General Hospital.*

(*a*) Type of cases best suited to resection, both as to general condition and type of obstruction. Pre- and postoperative care—Harry W. Martin, M. D., Los Angeles.

(*b*) Type of apparatus and technique used, both that of electric energy and urethral instruments—Roger W. Barnes, M. D., Los Angeles.

(*c*) A comparative series of cases from the same hospital, by the open suprapubic approach, the perineal approach and instruments other than resectoscope—Jay J. Crane, M. D., Los Angeles.

(*d*) The end results of resectoscope operations as to function, general condition and mortality statistics, accidents encountered and complications—Paul A. Ferrier, M. D., Los Angeles.

117. *Resectoscopic Hazards*—A. M. Meads, M. D., Oakland.

This is a review of thirty-six consecutive cases from the standpoint of poor results only. These are classified as to type, cystoscopic findings and autopsy findings. The conditions leading up to the unsatisfactory termination of each case is explained, and suggestions are made for the avoidance of the same.

Discussion by Robert V. Day, M. D., Los Angeles, and Henry A. R. Kreutzmann, M. D., San Francisco.

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Second Meeting—Tower Room

Tuesday, April 25, 8:30 to 11:30 a. m.

118. *Treatment of Tumors of the Testis as Regards the Indications for Radical Operation*—Frank Hinman, M. D., San Francisco.

The clinical problem of teratoma testis. (*a*) Differences of opinion regarding pathology. (*b*) Differences of opinion regarding the clinical problem. The status of radical operation. (*a*) Indications and contraindications. (*b*) Technic of the operation. Conclusions.

Discussion by W. B. Parker, M. D., Los Angeles, and James R. Dillon, M. D., San Francisco.

119. *Injuries of the Female Bladder Incident to Surgery*—William E. Stevens, M. D., San Francisco.

Accidental incision and tearing of the bladder as well as serious damage to this organ without perforation are more common during pelvic operations than is generally appreciated. Operations during which bladder injuries are most likely to occur. Subjective symptoms and objective findings. Case reports. Treatment. (Lantern slides.)

Discussion by Herbert A. Rosenkranz, M. D., Los Angeles, and L. P. Player, M. D., San Francisco.

RECESS

Election of Officers and Business Meeting

(Note.—If some other time is decided upon, a standing notice to that effect will be placed on the Section's bulletin board.)

120. *Traumatic Rupture of the Kidney*—George F. Schenck, M. D., Los Angeles.

Incidence. Causative agents. Sex, age, predisposing factors. Pathology. Diagnosis. Symptoms, when present, vary widely in degree of severity, frequently delayed in appearance. Treatment, indications as to the expectant or immediate surgical interference. Value of follow-up in observation and treatment. Report of cases. (Lantern slides.)

Discussion by Charles P. Mathé, M. D., San Francisco, and Clarke M. Johnson, M. D., San Francisco.

121. *Urinary Calculi Treated in a Railway Hospital*—Burnett W. Wright, M. D., Los Angeles.

A preliminary report on a study that is being made of the probable etiological factors having to do with the frequent occurrence of urinary calculi among the employees on the Coast Lines Division of the Santa Fe Railroad. (Lantern slides.)

Discussion by T. E. Gibson, M. D., San Francisco.

122. *Perforation of the Bladder by Pelvic Abscess*—Dudley P. Fagerstrom, M. D., San Jose.

Source of pyuria is at times difficult to determine, when a careful investigation does not reveal evidence of infection of the upper urinary tract or of the sexual appendages. The possibility of a pelvic abscess communicating with the bladder should always be considered. Review of literature. Report of cases, and x-ray films.

Discussion by George W. Hartman, M. D., San Francisco.

PRE-CONVENTION BULLETIN

Section 3 of Article XII of the California Medical Association Constitution states in part: "The Association, prior to the annual session, shall print a 'Pre-Convention Bulletin,' which shall contain reports of officers and committees. . . . A copy of the 'Pre-Convention Bulletin' shall be given to each delegate and alternate, on or before registration."

REPORTS OF GENERAL OFFICERS

REPORT OF THE PRESIDENT

To the House of Delegates:

The President desires to report that during the year he has performed the duties of his office to the best of his ability, having visited various parts of the state, speaking before some of the County Medical Associations, addressing some of the Woman's Auxiliaries, and attending in so far as was practicable, the various boards and committees of which he is ex officio a member, and taking an active part in their deliberations.

Respectfully submitted,

Joseph M. King, *President.*

REPORT OF PRESIDENT-ELECT

To the President and the House of Delegates:

The President-Elect has attended the meetings of the various committees of which he is an ex-officio member, and has studied the matters submitted in an earnest endeavor to acquaint himself with the problems, so that he may best serve the welfare of the Association and the wishes of the membership.

Respectfully submitted,

George G. Reinle, *President-Elect.*

REPORT OF THE SPEAKER OF THE HOUSE OF DELEGATES

To the President and the House of Delegates:

The Speaker desires to thank all officers, committees, and delegates for their coöperation during the past year.

In view of the large number of important matters to come before the House of Delegates at this meeting, it is hoped that there may be a full attendance and that all delegates and alternates will familiarize themselves with the reports of the officers and committees in this issue of CALIFORNIA AND WESTERN MEDICINE.

In accordance with the by-laws, the following committees are hereby appointed:

Credentials Committee—Benjamin W. Black of Alameda County (chairman), Charles T. Sturgeon of Los Angeles County, and Dexter R. Ball of Orange County.

Reference Committee on Reports of Officers and Standing Committees—Alson R. Kilgore of San Francisco County (chairman), E. Eric Larson of Los Angeles County, and William Dock of San Francisco County.

Reference Committee on New and Miscellaneous Business—William R. Molony of Los Angeles County (chairman), Irving S. Ingber of San Francisco County, and Charles E. Schoff of Sacramento County.

There will be two sessions of the House of Delegates during this convention: on Monday and Wednesday evenings at eight o'clock sharp, and both in the Assembly Room of the hotel.

Respectfully submitted

Edward M. Pallette, *Speaker.*

REPORT OF SECRETARY-TREASURER

To the President and the House of Delegates:

Surprising as the statement may be, the year 1932 showed growth in membership and no inroad on the surplus recorded for the previous year. By reason of the new activities inaugurated by the House of Delegates, saving was decreased from an average yearly gain of $9,000 to but $99.22.

The membership of the California Medical Association on December 31, 1932—active, associate, honorary, and retired members—numbered 5,035, thirty-one more than on the same date of the previous year.

The Placement Bureau recorded many more applications for medical and stenographic help than heretofore. But eighteen stenographers and eight physicians, a smaller number than in any previous year secured positions. No calls for technicians were received.

Since the last annual session there have been five meetings of the Council—one, the reorganization meeting at Pasadena on the last day of the annual session; one held at Los Angeles, and three in San Francisco. Four others will be held during this session at Del Monte. There were but three meetings of the Executive Committee—one, a reorganization meeting in conjunction with the first Council meeting in San Francisco; one held in December to comply with the requirements of the Constitution and By-Laws; and one at the order of the Council to carry out work assigned by that body. Nine meetings of the Public Relations Committee—five in San Francisco and four in Los Angeles—have been held since the last annual session. The total number of Association meetings for 1931-1932 being, therefore, twenty-one.

It should be noted that reports for membership and for finances are for the fiscal year from January 1, 1932, to December 31, 1932, while those for committee meetings, records of the Placement Bureau, etc., are taken from one annual session to the next. An attempt was made to correct this discrepancy by change of the fiscal year. But since time is required to audit the books of the Association for presentation before the House of Delegates meeting, the change was not possible.

There has been no change in assistants in the office of the State Association. Increase of duties, due to increase in the number of meetings held, to the innovation of a new bookkeeping system, to changes in the editorial department, and to increase in membership has been assumed capably and cheerfully. Normal increase in membership adds increase in duties so gradually that only through comparison is a correct picture presented. Membership has doubled since 1915; whereas 350 members registered at Coronado in 1916, 1200 have been registered for several years past; and whereas only a few thousand dollars were handled through the Association books then, approximately $75,000 is now handled yearly.

Component County Society secretaries deserve most sincere thanks for their able and unfailing attention to the duties of their office and their helpful coöperation with the State office. Whether due to careful selection of peculiarly qualified members or to introduction of efficient business methods in their offices, the result is gratifying and the sincere thanks of the State Secretary is accorded to the secretaries of all the Component County Medical Societies.

REPORT OF THE TREASURER

Finances—General Review.—The finances of the Association hold peculiar interest for members of the

House of Delegates. The chairman of the Auditing Committee will present and explain in full the financial audit. A general review of the appended audit shows a balance sheet and three profit and loss divisions, one of the accounts of the California Medical Association, one of the JOURNAL of the California Medical Association, and one of the funds transferred by the California Medical Association to the corporation "Trustees Of The California Medical Association." Included with the 1932 audit are ten schedules that give itemized information on (*a*) cash assets; (*b*) general office expense; expenses of (*c*) legal department; (*d*) of annual meeting; (*e*) of the Council; (*f*) of various committees; (*g*) Department of Public Relations. Detailed information is appended to the statement of CALIFORNIA AND WESTERN MEDICINE, itemizing, respectively, JOURNAL subscriptions, production and distribution costs of JOURNAL, and general and clerical expenses. Full information wanted on costs of any item can, through these appended schedules, now be found.

This financial statement, as audited and certified by Mr. Hugh Ross, is submitted as the report of the treasurer.

Respectfully submitted,

Emma W. Pope, *Secretary-Treasurer.*

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FINANCIAL REPORT FOR CALENDAR YEAR 1932

Balance Sheet

DECEMBER 31, 1932

ASSETS		
Cash		$35,229.49
Accounts receivable:		
Advertisers in Journal	$4,814.68	
Miscellaneous	24.80	
Deposit in United States Post Office	75.00	
		4,914.48
Deferred charges:		
Rent paid in advance		367.50
Office equipment:		
Cost	6,701.90	
Less depreciation	2,416.53	
		4,285.37
		$44,796.84
LIABILITIES		
Note payable:		
Wells-Fargo Bank and Union Trust Co.		3,500.00
Accounts payable:		
Sundry		374.73
Deferred income:		
Dues collected in advance		250.00
Reserve fund:		
Herzstein Bequest		2,539.35
		$ 6,664.08
NET		
Surplus	113,455.61	
Less transferred to "Trustees Of The California Medical Association"	75,322.85	
		38,132.76
		$44,796.84

DETAIL

CASH

Wells-Fargo Bank and Union Trust Co.:		
Current account		$ 1,662.97
Revolving funds:		
Salary	$ 1,300.00	
General	1,000.00	
Petty cash	50.00	
		2,350.00
Savings' accounts:		
Anglo California National Bank	13,063.88	
Security First National Bank of Los Angeles	11,498.65	
Wells-Fargo Bank and Union Trust Co.	6,653.99	
		31,216.52
		$35,229.49

SURPLUS

January 1, opening balance		$115,038.80
Adjustment for 1931		150.00
		$115,188.80
Gain or loss for year:		
Association Gain	$3,701.03	
Journal Loss	5,434.22	
Loss		1,733.19
		$113,455.61
Less transferred to "Trustees Of The California Medical Association"		75,322.85
		$ 38,132.76

I. Association Division—Profit and Loss

Number of members			4,975
INCOME			
County society dues	$49,490.00		
Less allocated to Journal 1/5	9,898.00		
		$39,592.00	
Other income:			
Interest	$1,294.27		
Exhibits at annual meeting	1,640.00		
Services to medical society	600.00		
Sales of directory	2.50		
Addressograph revenue	16.97		
		3,553.74	
Total income			$43,145.74
EXPENSE—*See Schedules A to F*			
A. General expense		$12,966.82	
B. Legal department		4,109.00	
C. Annual meeting expense		3,607.12	
D. Council expense		898.57	
E. Committees' expense		5,166.72	
F. Department of Public Relations		7,909.75	
Delegates to American Medical Association convention		1,077.62	
Directory of members		908.40	
Subscriptions:			
Lane Medical Library	$1,392.00		
Barlow Medical Library	1,392.00		
		2,784.00	
Losses		16.71	
Total expense			$39,444.71
NET			
Gain for year			$ 3,701.03

DETAIL

1932 COUNTY SOCIETY DUES

Year	Rate	Rate	Members	Amount
1932	Year	$10.00	4.871	$48,710.00
1932	Half year	5.00	98	490.00
1932	Associates	5.00	6	30.00
	Total		4,975	$49,230.00
Dues collected for prior year:				
1931	Year	$10.00	24	$ 240.00
1931	Half year	5.00	4	20.00
				$49,490.00

SCHEDULES OF EXPENSE

(A) GENERAL EXPENSE

Salaries:			
Secretary	$3,844.44		
Clerical	4,100.04		
			$ 7,944.48
Taxes:			
Federal tax on checks	5.20		
San Francisco, personal property	46.39		
			51.59
Rent			2,052.00
Postage			339.24
Telephone and telegrams			364.61
Office:			
Supplies	1,063.95		
Expense	290.08		
Sundry	229.69		
Depreciation office equipment	631.18		
			2,214.90
			$12,966.82

(B) LEGAL DEPARTMENT

General counsel:	
Retainer	$4,000.00
Legal fees and expense	102.00
Supplies	7.00
	$4,109.00

(C) ANNUAL MEETING EXPENSE

Badges	$ 253.41
Installation	434.78
Invited guests	1,061.56
Hotel and entertainment	1,152.87
Printing, stationery and sundry	704.50
	$3,607.12

(D) COUNCIL EXPENSE

Transportation	$875.12
Sundry	23.45
	$898.57

(E) COMMITTEES' EXPENSE

Executive Committee:		
Transportation	$ 193.30	
Sundry	1.00	
		$ 194.30
Extension lectures:		
100 reprints lecture course		8.00
Public Relations Committee:		
Transportation	1,046.85	
Advanced attorney for expenses	1,035.00	
Roy Kelly on Medical Plan	138.20	
		2,220.05
Cancer Commission:		
Salaries, clerical	1,080.00	
Rent	450.00	
Postage	125.15	
Telephone and telegrams	35.19	
Office supplies	260.39	
Office expense	5.02	
Sundry expense	12.20	
Transportation	204.13	
		2,172.08
Clinical and Research Prizes:		
Clinical Prize	150.00	
Research Prize	150.00	
Framing, lettering and express	14.19	
500 reprints of prize papers	40.50	
		354.69
Scientific Sections:		
Letter heads for twelve sections		70.00
Others:		
Committee on Survey of Expenditures		72.60
1500 copies of booklet "A Standard of Clinics"		75.00
		$5,166.72

(F) DEPARTMENT OF PUBLIC RELATIONS

Salaries:		
Director	$4,800.00	
Clerical	1,085.16	
		$5,885.16
Rent		900.00
Postage		247.25
Telephone and telegrams		81.96
Office expense:		
Supplies	327.66	
Expense	50.47	
Sundry	117.05	
		495.18
Transportation		300.20
		$7,909.75

II. Journal Division—Profit and Loss

Number of copies issued 69,150

INCOME			
Advertising		$25,792.74	
Subscriptions		11,556.67	
Sale of review books		180.00	
Total income			$37,529.41
EXPENSE—*See Schedules H, K, L*			
Journal:			
Production	$24,023.87		
Distribution	2,332.77		
		26,356.64	
Selling expense:			
Advertising commission	4,183.90		
Collection expense and discounts	105.42		
Advertising	33.00		
		4,322.32	
Promotion:			
Journals furnished to:			
Advertisers	522.00		
Exchange journals	345.00		
Complimentary	189.00		
		1,056.00	
General expense		10,873.87	
Bad debts		354.80	
Total expense			$42,963.63
		$39,592.00	
NET			
Loss for year			$ 5,434.22

SCHEDULES H, K AND L

(H) SUBSCRIPTIONS

County Society dues allocated	$ 9,898.00
Nevada Medical Association	164.00
Cash sales	438.67
Journals to advertisers	522.00
Journals to others	534.00
	$11,556.67

(K) JOURNAL PRODUCTION

Cost	$22,406.55
Proof changes	740.00
Illustrations	877.32
	$24,023.87

JOURNAL DISTRIBUTION

Correcting mailing list	$ 720.00
Wrappers	292.00
Postage	1,080.77
Mailing	240.00
	$2,332.77

(L) GENERAL EXPENSE

Salaries:		
Editorial	$5,222.20	
Clerical	3,749.96	
		$8,972.16
Rent		1,020.00
Postage		414.72
Telephone and telegrams		126.82
Office expense.		
Supplies	236.15	
Expense	101.02	
Sundry	3.00	
		340.17
		$10,873.87

III. Trustees of California Medical Association Balance Sheet

DECEMBER 31, 1932

ASSETS

Cash, savings accounts:		
Bank of America, Humboldt branch	$ 782.56	
Crocker First Federal Trust Co.	12,969.50	
Wells-Fargo Bank & Union Trust Co.	14,406.95	
		$28,159.01
Bonds:		
Liberty Fourth 4¼% par $24,000	23,902.50	
Treasury 4% 1944-54 par $25,000	25,093.75	
		$48,996.25
Total assets		$77,155.26

LIABILITIES

Accounts payable	Nil

NET

Surplus paid in:	
California Medical Association	$75,322.85
Surplus from earnings:	
To December 31, 1932	1,832.41
	$77,155.26

PROFIT AND LOSS

Income:		
Interest on bonds and savings accounts		$2,155.26
Expense:		
December, 1931—Opening of books and accounting services	$150.00	
Books and supplies	12.85	
April, 1932—Premium on bonds of secretary and chairman	50.00	
May, 1932—Permit from Division of Corporations	10.00	
Audit of accounts for fiscal year and application for exemption from tax	100.00	
Total expense		322.85
Net:		
Surplus from earnings to December 31, 1932		$1,832.41

IV. Herzstein Bequest

For Suppression of Quackery in the Practice of Medicine

RECEIPTS

July, 1929	Cash	$ 941.20
July, 1930	Cash	746.58
Dec., 1930	Interest earned by fund	65.78
July, 1931	Cash	842.30
Dec., 1931	Interest earned by fund	76.12
July, 1932	Cash	849.88
Dec., 1932	Interest earned by fund	89.80
		$3,611.66

PAYMENTS

1932	Public health exhibits	$1,072.31

NET

December 31, 1932	Balance in fund	$2,539.35

Summary of Earnings

Year	Association Gain	Journal Loss	Trustees Gain	Total Gain
1932	$3,701.03	$5,434.22	$1,832.41	$99.22

Auditor's Statement

San Francisco, Calif.
February 23, 1933.

I have audited the books of account and records of the California Medical Association for the year 1932, and hereby certify that the foregoing balance sheet and relative profit and loss accounts and statements attached hereto exhibit a true record of the financial affairs of the Association for the year.

HUGH ROSS.

REPORT OF THE EDITOR

To the President and the House of Delegates:

The report herewith submitted will deal with the number of papers received, printed, awaiting publication, and declined. A few words of explanation in regard to the figures which follow may be in order. As the California Medical Association has grown, the number of scientific sections has increased. In the four-day annual session a sufficient number of papers are read to more than supply a monthly publication of twice the size of CALIFORNIA AND WESTERN MEDICINE. In order to provide diversity in the printed contents of the official publication and to be in position to publish important current medical matter, it has become necessary for the Committee on Publications, with the sanction of the Council, to accept only a limited number of papers from each annual session section. However, many papers in which specialty topics are discussed in detail find a ready outlet in the various specialty journals. These various difficulties are discussed in the CALIFORNIA AND WESTERN MEDICINE leaflet, "Suggestions to Authors." A copy of this sixteen-page leaflet will be sent to any member upon request to the San Francisco office of CALIFORNIA AND WESTERN MEDICINE.

During the last year, special emphasis has been given to papers and discussions on medico-economic topics and to subject matter having a special interest for California physicians.

The financial report of CALIFORNIA AND WESTERN MEDICINE will be presented to the House of Delegates. In spite of material reductions in general overhead expenses, the official journal has had a stormy financial year. This has been due to the general economic condition of the last several years which led a considerable number of long-standing advertisers to withdraw their announcements. Earnest efforts have been made to keep down this advertising loss as much as possible.

The report on papers received, printed, awaiting publication, and declined follows:

(a) *Report on Annual Session Papers of 1932—Pasadena Session.*

At the 1932 Pasadena annual session a total of 135 papers were read before the different sections. A summary of last year's annual session papers follows:

Pasadena annual session papers published in 1932	16
Pasadena annual session papers published in 1933	13
Pasadena annual session papers read (but published elsewhere, declined or not sent in)	76
Pasadena annual session papers in CALIFORNIA AND WESTERN MEDICINE files still awaiting publication (annual session papers in this April issue still to be deducted)	30
Total Pasadena annual session papers were	135

(b) *Report on All Special Articles Which Have Been Printed in California and Western Medicine During Period April 1932 to April 1933 Issues, Inclusive.*

Special and original articles which were published in CALIFORNIA AND WESTERN MEDICINE during the past year (April 1932 to April 1933 issues, inclusive) are as follows:

Section papers from 1930 annual session (Del Monte session)	1
Section papers from 1931 annual session (San Francisco session)	28
Section papers from 1932 annual session (Pasadena session)	26
California Medical Association prize papers Pasadena session)	2
Papers read before General Session (Pasadena session)	3
Lure of Medical History articles	19
Papers from Nevada State Medical Association meetings	4
Papers read before county and other medical societies	5
Papers accepted from miscellaneous sources (original articles, abstracts of speeches, reprints from other publications, etc.)	27
Clinical and Case Report articles	41
Editorial Comment articles	26
Bedside Medicine symposia	12
Total papers published during past year	194

(c) *Report on Manuscripts in California and Western Medicine Files and Awaiting Publication.*

CALIFORNIA AND WESTERN MEDICINE has on hand manuscripts which have been accepted and which are awaiting publication in issues of April, 1933, and later.

Unpublished papers from 1932 annual session (Pasadena)	31
Unpublished papers read before county and other societies	1
Unpublished papers not read before other societies	11
Unpublished papers read before Nevada Association	3
Lure of Medical History articles	5
Clinical and Case Report articles	28
Editorial Comment articles	6
Bedside Medicine symposia	3
Total manuscripts on hand awaiting publication	88

(d) *Report on Nonannual Session Papers Submitted.*

A total of fifty-four papers from county societies and other sources which were submitted for publication in CALIFORNIA AND WESTERN MEDICINE this past year (April 1932 to April 1933, inclusive) could not be accepted for various and special reasons:

Nonannual session papers submitted, but declined	54

It must be evident from the above figures that the official journal has been favored by the coöperation of a large number of members of the California Medical Association. To all who have submitted papers, and especially to those members who have so often aided in making the special feature departments and discussions of live interest, the Committee on Publications is deeply appreciative and expresses its thanks.

Respectfully submitted,
George H. Kress, *Editor.*

REPORT OF THE COUNCIL CHAIRMAN

To the President and the House of Delegates:

The full report of the Council cannot be printed in the *Pre-Convention Bulletin.* It is read at the first meeting of the House of Delegates after submission to the Council at its meeting on Sunday preceding the annual session.

The complete report will consist of a résumë of the work accomplished by the Council and the problems which have confronted it throughout the year.

The chairman of the Council desires to state that the attendance at Council meetings has been almost 100 per cent, and that the good of the Association has had the earnest attention and coöperation of all its members.

Respectfully submitted,
O. D. Hamlin, *Chairman.*

REPORTS OF DISTRICT COUNCILORS

FIRST COUNCILOR DISTRICT

San Diego, Riverside, Orange and Imperial Counties

To the President and the House of Delegates:

The councilor for the First District has attended all meetings of the Council and has visited all the societies in the district at least once during the past year.

It is a pleasure to be able to report that all county societies in the district are in very satisfactory condition. Membership has been maintained, the quality of work done in the scientific meetings has been excellent, and a healthy interest in medical economics has been maintained. All of these societies have very satisfactory relations with the county hospitals and public health officials. The San Diego society has evolved a most practical and interesting plan for the handling of clinic and part-pay patients and its practical application is being followed with much interest by the other communities in which these problems are pressing for solution.

Respectfully submitted,
W. W. Roblee, *Councilor,*
First District.

SECOND COUNCILOR DISTRICT

Los Angeles County

To the President and the House of Delegates:

A résumé of the membership roster for 1932 of the Los Angeles County Medical Association presents some remarkable figures. There was a total of 2,009 members reported by the secretary in his annual report, of which 1,866 paid full dues of $22. Forty-five were received on the half-yearly basis at $11, two came in at $10, and one at $7. Those not paying dues were distributed as follows: Seventeen were military members, fifty-six were honorary, twenty were on leave of absence, and two were from other counties. The branches showed a membership as follows:

	Members
Alhambra	18
Glendale	33
Monrovia	13
Pomona	22
Southeast	20
San Fernando	43
Santa Monica	64
Southwest	14
Harbor	108
Pasadena	111

As for 1933, it is probable that there will be a loss of membership, though not so great as in many of the county associations in the industrial centers of the East. It is interesting to note that on March 1, 1932, 1501 members had paid dues for the year, while on March 1, 1933, 1319 had paid dues—a drop of 182.

During 1932 a definite step was taken in the matter of permanent quarters for the Association by trading properties for the northeast corner of Wilshire and Westlake upon which was a building which has been remodeled and equipped for headquarters with an auditorium of sufficient size to accommodate the average attendance, with other rooms for section meetings, and there is now being installed a catering department.

When financial conditions warrant, a library building will be erected on the upper portion of the lot in which will be housed the Barlow Medical Library. The scientific work of the sections and branches has never been better, and the attendance has been outstanding. The various committees have functioned with universal efficiency, especially those having to do with medical economics, hospitals, dispensaries, and clinics, showing plainly that the members have come to a realization of the value of organization and the need of mass action.

The Woman's Auxiliary shows no abatement in interest, and it is the belief of the councilor of this district that the increased interest of the membership is in no small measure due to the efforts of this organization. There is a need of active committee work in the auxiliary. Under the able leadership of Mrs. A. B. Cooke, former president of the Ebell Club, much may be expected this year in this line of endeavor. The splendid women who have carried this work from its inception deserve the highest commendation from the profession.

Respectfully submitted,

William Duffield, *Councilor,*
Second District.

THIRD COUNCILOR DISTRICT

Kern, San Bernardino, San Luis Obispo, Santa Barbara and Ventura Counties

To the President and the House of Delegates:

All the county societies in the district are showing great interest in medical economics, much more so this year than previously, and earnest efforts are being made to assist those in moderate and more than moderate financial circumstances to meet the cost of hospitalization and medical care. Discussion was heard on all sides in regard to periodic payment contracts for both hospital service and medical care; and in two counties, Santa Barbara and Kern, schedules of reduced rates for those having incomes below a certain stated sum have been drawn up. In Santa Barbara it is an informal arrangement between the doctors and Saint Francis Hospital, and in Kern County there is a Kern Medical Economy Group authorized by the Kern County Medical Society. Anyone wishing information as to the formation of this group and the fee schedule, should write to Dr. Seymour Strongin, San Joaquin Hospital, Bakersfield, secretary of the Kern County Medical Society, for details.

The most interesting County Hospital situation in the district, from a constructive standpoint, is that in San Bernardino County, where the County Hospital has been placed in complete charge, both medical and business, of the Medical Advisory Board, consisting of five doctors representing the five supervisors and each appointed by his own supervisor. The superintendent of the hospital is in absolute control and hires and discharges all employees, subject to the Medical Advisory Board. It really amounts to the Medical Advisory Board running the hospital through the superintendent, as chief executive. They have just completed a second revision of salaries, and these two revisions have cut $100,000 from an original budget of $240,000 and this was accomplished in spite of a 30 per cent increase in the work of the hospital. The success of the plan quite definitely lies in the coöperation between the hospital, the medical society, and the welfare service. The hospital will take in no pay patients, that is, patients who can pay anything at all. Paragraph A-3 of the Summary of Recommendations takes care of the frequently arising situation, which is often the cause of considerable discussion.

"A-3. Cases where applicant can pay something toward his treatment. Every such case will be referred to the regional member of the Medical Advisory Board with a statement of the facts. Every effort will be made to have the work done at home for the money available. The physician referring such patients shall be given the first opportunity to do this work. If he cannot or will not do it, the member of the Medical Advisory Board handling the case will make arrangements with another physician to have the work done. If, however, such arrangements cannot be made, the case should be referred back to the original branch of the welfare service for admission as a charity case."

Only charity cases are admitted to the clinic or hospital, except industrial accident cases in county employees. Nonindustrial accidents or diseases of county employees or illness or injury in a county employee's family are treated in the same manner as any other case. Of course, the handling of tuberculosis, contagious or other similar cases, as provided by law, are taken care of in the usual manner. These patients will pay fees individually adjusted for services in those departments, as this is regarded as a public health function and therefore is a justified expenditure. Apart from these classes, no fees will be charged or collected. Anyone interested in the entire recommendation and details of the working of this plan in San Bernardino County should write to Dr. E. J. Eytinge, secretary of the County Medical Society, Redlands.

No report will be made on the status of the suits against the supervisors of Santa Barbara or Kern counties, as they will be taken up under the report of the counsel.

Respectfully submitted,

H. J. Ullmann, *Councilor,*
Third District.

FOURTH COUNCILOR DISTRICT

Calaveras, Fresno, Inyo, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare and Tuolumne Counties

To the President and the House of Delegates:

I herewith submit the following report as councilor of the Fourth District.

Councilor visits were made to each organized society in the Fourth District at least once during the fiscal year. The outstanding point noticed was that there was a greater unity among the members of the local units, a more keen interest shown in medico-economic affairs, and an aroused consciousness of the necessity for firmer union among medical men.

Fresno County unit has the largest membership in the district. They have quite an active Public Relations Committee, which is most interested in working out a medico-social plan built around the principles

previously adopted by the Council at its September meeting.

Tulare, Merced, and Stanislaus County units are all active societies, having regular, well-attended meetings.

San Joaquin County unit also has a very active Public Relations Committee, whose members are carefully studying the various plans for the betterment of medico-social problems and conditions.

The membership in all these societies maintains about the numerical ratio as in previous years. Medical men in the counties of the Fourth District which have no local units have membership in adjacent units. Hence the ratio of society members to licentiates in this district compares favorably with other sections in the state.

Respectfully submitted,

Fred R. DeLappe, *Councilor, Fourth District.*

FIFTH COUNCILOR DISTRICT

Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz Counties

To the President and the House of Delegates:

There has been nothing outstanding in events throughout the Fifth District during the past year.

The membership and attendance of members of the various county societies has not materially changed. All meetings have been well attended and have been interesting and instructive.

The problems of medical economics have been frequently discussed, but as yet no definite action has been taken by any of the component societies.

Respectfully submitted,

Alfred L. Phillips, *Councilor. Fifth District.*

SIXTH COUNCILOR DISTRICT

San Francisco County

To the President and the House of Delegates:

During the past year the local members of the Association have made greater strides than ever before in the studies of our mutual problems.

There have been many meetings of special and general groups, where there has been careful consideration of the many economic problems that face us. The spirit, earnestness of purpose, and individual effort for the common good has been most commendable.

Medical protective insurance, health and hospital insurance, credit information, and medical legislation have occupied the time of the membership for almost the entire year. While the studies have not solved our problems, they are leading us toward what we hope may be solutions, and have been a great factor in welding the society into a closer unit.

The adoption of a new constitution has given us a better working basis, and now there are nine very active committees and a section on economics who help to facilitate and accelerate the work of the board of directors.

We look forward to a year of very hard and intensive work, but feel, from the spirit shown by the membership, that, while success cannot be expected within that time, we will be well on our way toward that goal.

Respectfully submitted,

Karl L. Schaupp, *Councilor. Sixth District.*

SEVENTH COUNCILOR DISTRICT

Alameda and Contra Costa Counties

To the President and the House of Delegates:

The outstanding activities of the Alameda County Medical Association during the past year have been along medical economic lines. The county society has developed and is sponsoring a plan for the care of patients in that economic group which is immediately above indigency and, therefore, not eligible to county care but who are unable to pay the physician's entire fee. The plan has been in operation for three months. The number of cases handled is rapidly increasing. The entire membership has been giving enthusiastic support to the project, and its operation appears at the present time to be reasonably satisfactory.

The periodic payment plan for hospital service, as proposed by the California Medical Association, is in process of development. The county association, together with the representatives of all of the standard hospitals in the East Bay area, are at present working upon the details of the plan.

A campaign of ethical publicity has been undertaken by the County Medical Association, and through a publicity committee and a paid publicity agent, medical news is being published regularly in the newspapers of the East Bay.

Feeling the desirability of early affiliation with organized medicine for the young man, our association has amended our constitution, permitting young men to enjoy the benefits of membership at a financial obligation within their reach. A junior associate membership has been added, which is open to men who have been in practice less than two years, with annual dues of $5.

The economic situation in the country at large has had a definite effect upon our organization, and it is with regret that we note the loss of more members than have entered during the year. The number of delinquent members at this writing is higher than at the same period in any previous year.

Respectfully submitted,

O. D. Hamlin, *Councilor, Seventh District.*

EIGHTH COUNCILOR DISTRICT

Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo and Yuba Counties.

To the President and the House of Delegates:

The councilor of the Eighth District attended all the meetings of the Council held at the Huntington Hotel during the past session of the California Medical Association. He also attended the September meeting in Los Angeles and the January meeting in San Francisco. He has taken care of the necessary correspondence with the secretaries of the various county societies in his district and has attended meetings of the Sacramento Society for Medical Improvement and all the meetings of the Placer County Medical Society.

This year, with the assistance of Doctor Dickie, director of the Department of Public Relations, and Dr. Junius B. Harris, he held several meetings with the Placer County Board of Supervisors at which the supervisors agreed to operate the new Placer County Hospital as the Placer County Charity Hospital, and to admit no pay patients.

There has been no dissension nor have there been any difficulties or problems in any of the county societies comprising the Eighth District which required the attention of the district councilor.

Respectfully submitted,

Robert A. Peers, *Councilor, Eighth District.*

NINTH COUNCILOR DISTRICT

Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, Siskiyou, Solano, Sonoma, and Trinities Counties

To the President and the House of Delegates:

A brief report of the medical societies' activities in the Ninth Councilor District during the year 1932 is submitted:

All of the medical societies in this district have been visited with the exception of the Humboldt County Society, which is generally visited the latter part of March. Mendocino County Society has been reorganized and held two meetings, the last meeting being held at the State Hospital at Talmage. The members seem to be quite enthusiastic over the re-formation of their society.

A joint meeting was held under the auspices of the Napa County Society at the Claremont Country Club

in Oakland, at which there were medical representatives from most of central California to listen to a comprehensive discussion on "Medical Economics" by Mr. Hartley Peart, Dr. Daniel Crosby, and Dr. Benjamin Black.

The societies in this district are all quite active. The meetings and the attendance of the meetings and enthusiasm of the members shows the interest each individual physician is taking in the county and state society. We are finding that joint society meetings, with an afternoon of golf for those who wish to play, followed by a dinner and scientific meeting, is very popular, and draws physicians from the bay sections as well as local members.

Respectfully submitted,
Henry S. Rogers, *Councilor, Ninth District.*

REPORTS OF COUNCILORS-AT-LARGE*

To the President and the House of Delegates:

As councilor-at-large for the California Medical Association, my chief endeavor has been to acquire intelligent information concerning the activities of the various committees in the organization and the many complex problems presented to the Council for its deliberations and decisions, particularly with respect to the work undertaken by the Committee on Public Relations.

It has been my sincere effort to deliberate with an open mind and to arrive at conclusions that would best serve the entire medical profession.

I have attended all the regular Council meetings and group meetings of the southern members.

Apart from the regular work of the Council, I have continued my special interest in the department of mental diseases and the relation of the medical profession to the handling of the insane in the State of California. The group engaged in this study has concluded its work for the year with the formulation of a new commitment law for California which we believe will bring California into line with the more progressive States in the matter of commitment and handling of the mental unfortunates. That proposed law is embodied in Assembly Bill 539 and has been approved by so many of the public-spirited individuals and organizations of the state that we feel confident of its passage. I feel that the State Association may take some just pride in having a part in the movement.

Respectfully submitted,
George G. Hunter, *Councilor-at-Large.*

To the President and the House of Delegates:

Since my appointment as councilor-at-large of the California Medical Association to complete the unexpired term of Dr. Ruggles A. Cushman, resigned, there has been but one meeting of the Council. I was much interested in the questions that came before that body and their deliberations, but I felt reluctant about taking any active part for the reason that I believed it was best for me to first become acquainted with the work of the Council.

It is my intention to visit the San Diego, Riverside, and the Imperial County Medical Societies before the state meeting in April.

A very splendid annual session of the Western Hospital Association was held in Long Beach during three days of February. There were many members and officers of the State Medical Association in attendance.

Respectfully submitted,
Harry E. Zaiser, *Councilor-at-Large.*

To the President and the House of Delegates:

The year that is just closing has been a very trying one to the medical profession in an economic way, but I feel that the things that will develop from the conditions that have been forced upon us will eventually work out for our benefit.

The county hospital situation of taking pay patients who are financially able to go elsewhere is a very vital question not only for the doctor, but also for the private hospitals and the taxpayers. We hope that what has been started this year may clear the atmosphere of these conditions.

The Department of Public Relations has done an enormous amount of work, and has suggested plans that may work to the good of the whole profession.

The Cancer Commission is continuing its activities and compiling statistics that should be very helpful to the profession at large.

The other activities of the Council have doubtless been thoroughly covered by the reports of the officers, and I will not discuss them.

Respectfully submitted,
W. H. Kiger, *Councilor-at-Large.*

To the President and the House of Delegates:

The activities of this particular councilor-at-large have been more in and about San Francisco and the office of the Association than in extensive traveling about the state.

The interest in the activities of the California Medical Association shown by the members of the bay region has been almost confined to those dealing with medico-economic problems and the matters of group medical and hospital services, and it seems that almost every county society is studying the problems quite carefully and seriously.

It is an immensely difficult problem that faces the profession due to the hesitation shown by many of its members to embark upon any sort of coöperative endeavor and to throw overboard many of the old canons of professional practice.

However, some attempts at solution will undoubtedly be made, and it would seem that the California Medical Association could best serve by carefully and intelligently fostering the study of any projected efforts and protecting the profession from too much outside interference with its own methods of solution.

It is the opinion of this councilor that the time is here when it is necessary for the Association to use every effort and resource to aid in the control or development of any changes that may be proposed or that may occur.

Respectfully submitted,
T. Henshaw Kelly, *Councilor-at-Large.*

To the President and the House of Delegates:

Inasmuch as the undersigned councilor-at-large is also chairman of the Committee on Public Policy and Legislation, almost his entire services to the Association have been devoted to subjects and duties connected with this committee. There has been a notable and laudable awakening in matters of public policy and legislation throughout the entire profession of our state. Never before has the medical man been as keenly alive to the pressing problems that confront him, and this interest has brought about the formation of some very valuable groups both in the northern and in the southern regions. These have effected liaison with other professional groups, who have added their strength in maintaining the present high standard of professional ethics and practice.

Talks before county societies throughout the state, committee work with the Department of Public Relations, and conferences with county and state legislative groups comprise your councilor's major activities for the year.

Respectfully submitted,
J. B. Harris, *Councilor-at-Large.*

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* The elected members of the Council consist of six councilors-at-large, nine district councilors, each of the latter representing a district or group of counties. These councilors-at-large, as officers, have their official responsibilities. Article XII, Section 3, which provides for a "Pre-Convention Bulletin," states that the bulletin shall contain a report from every officer. To that end the councilors-at-large were requested to send in reports on any matters in which they were interested and which perhaps might be worthy of consideration by the reference committees and the House of Delegates.

REPORTS OF STANDING COMMITTEES*

COMMITTEE ON ASSOCIATED SOCIETIES AND TECHNICAL GROUPS

Executive Group

R. Manning Clarke, Chairman, 1934
William H. Geistweit, 1933 Clifford Sweet, 1935

To the President and the House of Delegates:

I beg to submit the following as the annual report for the year 1932, during which time my committee has served as the Committee on Associated Societies and Technical Groups.

In submitting this report, I wish to say that it is the observation of your chairman that there is one thing that has happened in all societies and technical groups with which we have had contact. And that is, that as their difficulties have greatly increased they have greatly increased their efforts. Everybody has worked harder, with the result that organizations are better perfected, and everyone is welded into a stronger working group than ever before. This is one blessing, I believe, that has come out of the depression and troubles that have beset us all.

In reporting on the Woman's Auxiliary to the California Medical Association, I wish to say that they have made the most advancement and done the hardest work of any group I know. The auxiliary came into being in San Diego four years ago, and there are now thirteen counties, splendidly organized and working beautifully, with a membership of 829. These accomplishments are the direct result of the high type of leadership displayed by each succeeding president. Their activities have to do with social, philanthropic, legislative, educational and public relations activities. To those who have been interested and followed their work, it has been nothing short of phenomenal. Some of the counties really should have special mention for the accomplishments they are bringing about. It would seem to me that Riverside County has shown such a splendid organization, such indomitable spirit, and their accomplishments have taken them so far in this particular line that special mention in their behalf would not be out of place. The Woman's Auxiliary of California have been specially honored by the election of one of its members, Mrs. James F. Percy of Los Angeles, to the national vice-presidency. Through the death of the president, Mrs. Freeman, Mrs. Percy has succeeded to the presidency. Her splendid ability is being felt in the national organization, and no doubt at the end of her term of office there will be great things to report from that particular quarter.

In my report on the dental society, I wish to say that activity in the leading scientific questions of their field has received more than its usual attention this year. Many meetings have been held, and prominent speakers brought before large audiences. The question of vitamins and diet in its influence over dental caries, etc., has received much consideration.

The greatest thing, however, that has come up in the dental group is their interest in dental economics. They have had contact with our own Doctor Graves and his committee. They have been much impressed and much interested. Committees are being appointed in large county societies for the investigation of this matter. The Los Angeles County Dental Association has recently appointed a committee of five prominent men from the southland who are charged with the responsibility of making definite reports as to what the Los Angeles County Dental Association should do in the matter of dental economics, especially with respect to simulating the example of the California Medical Association in the steps it has already taken in pioneering the economic field.

Our dietitians are as active as usual. They have fine leadership, and their meetings are an inspiration. Our president, Dr. Joseph King, was unable to keep his appointment with them, and sent the writer to represent him with an address of welcome at their last meeting in Los Angeles. The meeting was well attended, well conducted, and helpful in every way. Several members of the California Medical Association were before them with fine talks, notably Doctors Verne Mason, Eaton MacLeod Mackay, W. J. Leake, Angus MacDonald, Howard Cooder, and Agnes Morgan.

Respectfully submitted,
R. Manning Clarke, *Chairman.*

* Members of Standing Committees are urged to meet during the annual session and organize for the coming year and to hold at least one regular meeting of their respective committee during the annual session.

COMMITTEE ON EXTENSION LECTURES

Executive Group

Robert T. Legge, Chairman, 1934
J. Homer Woolsey, 1933 James F. Churchill, 1935
The Secretary, ex officio

To the President and the House of Delegates:

The Committee on Extension Lectures have the honor to report for the year 1932-1933 as follows:

During the past year, probably on account of the economic depression, there have been very few inquiries for Extension Lectures. Other factors that have lessened the demand for this service are the multiplicity of medical meetings in our cities (easily reached by rapid transportation), the monthly staff meetings with programs in our large hospitals, and the many county society meetings in sections for different specialties. Selected and private medical societies prevail, and the medical schools offer popular and scientific lecture courses, besides the many national societies that annually meet in our state.

The secretary has a number of able speakers on subjects of great interest available, many of which are original contributions to medicine. The committee urges and invites the members of our society to offer their services and to list their subjects with the secretary so that they may be available when solicited by secretaries of our various county societies.

During the past year there were listed a number of selected medical films, which may be procured in some instances gratis and in others on payment of a loan fee. Many of these films demonstrate some of the newer developments in surgical and laboratory technique, in preventive medicine, and popular medical subjects for the laity.

Your committee suggests and recommends that the state society develop and undertake to broadcast medical subjects on certain evenings, enabling county meetings to listen in and hear notable visiting speakers on popular and scientific medicine. By this means the Stanford University popular lectures, Academy of Medicine, Lane Lectures, University of California guest speakers, etc., could be enjoyed by the physicians throughout the state.

Respectfully submitted,
Robert T. Legge, *Chairman.*

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Executive Group

Fred B. Clarke, Chairman, 1935
W. R. P. Clark, 1933 Langley Porter, 1934

To the President and the House of Delegates:

The committee's activities for the year 1932 might be divided into two major activities:

First: Coöperation with the other members of the Public Relations Department in a comprehensive plan for the rendering of medical and hospital care to people of moderate means.

Second: Development of educational exhibits at the major fairs of the state—Sacramento and Pomona.

There has been a great deal of favorable comment upon the exhibits developed by the Committee on Health and Public Instruction, and I am quite convinced that, for the money expended, they are well worth while.

It is my belief that the State Association should extend their activities along this line and make it possible to bring these exhibits to a greater number of the larger fairs in the state during the coming year.

EDUCATIONAL ACTIVITIES

Radio Broadcasting.—Two years ago, and again last year, I made certain suggestions regarding radio broadcasting. Inasmuch as the Los Angeles County

Medical Association broadcast twice a week over KECA and KFI, two of our larger stations, I thought that it might be possible to have a state hook-up, using the same material. Apparently this has not been possible, but it is to be hoped that such arrangement can eventually be made.

Educational Literature.—It is our belief that closer sympathy should exist between the patient and the doctor. That the patients should be more conversant with the various problems which confront the medical profession but which are more important to the public. It is quite possible, and I believe that the Public Relations Department should prepare a series of twelve pamphlets dealing with the prevention of disease and symptoms pointing to early recognition of disease. These pamphlets could be distributed through each county unit to members of the Association who could mail them out to patients with the monthly statements.

We must find some way for a little better understanding and closer contact with the public because some of these days it will be very necessary to be able to contact a large group for the purpose of preventing adverse legislation.

Speakers' Bureau.—It is our earnest suggestion that each county medical society develop a speakers' bureau, using care in the selection of men and the subjects to be presented, and then make it their business to furnish speakers to the Parent-Teacher Associations, women's clubs, service clubs, and commercial organizations. This has been done in various places and certainly would be a means of bringing the laity in closer contact with the subject they are vitally interested in.

Need for Greater Interest on the Part of the Profession in Preventive Measures.—Immunization of children against diphtheria, smallpox, etc., has apparently not been an active concern of the average doctor. They have been content to permit this field of medicine to be taken over by public health agencies. It is highly important that the physicians should be made conversant with this field not only from the standpoint of the health of the boys and girls, but in order that they will be in closer contact with their patients. Suggestions should be worked out by the Public Relations Department, and the coöperation of all county societies secured in carrying them out.

Respectfully submitted,

Fred B. Clarke, *Chairman.*

COMMITTEE ON HISTORY AND OBITUARIES

Executive Group

Charles D. Ball, Chairman, 1935
Emmet Rixford, 1933 George D. Lyman, 1934
The Secretary, ex officio The Editor, ex officio

To the President and the House of Delegates:

Since the last session, the California Medical Association has lost sixty-seven members through death. The names of these colleagues who are no longer with us follow.

IN MEMORIAM

Bemis, Orion Irving, died at Modesto, December 7, 1931, age 62.
Hamman, Amos F., died September, 1931, age 57.
Langley, Elmer Ellsworth, died November 12, 1931, age 49.
Mahoney, Margaret Josephine, died at San Francisco, December 7, 1931, age 73.
Barkema, Roelf, died January 2, 1932, age 38.
Copeland, John Charles, died at San Diego, December 31, 1931, age 59.
Emerson, Henry K., died at Los Angeles, January 1, 1931, age 63.
Smith, Sydney Henry, died at San Francisco, December 17, 1931, age 52.
Walter, William Alexander, died at Los Angeles, December 25, 1931, age 51.
Brill, Selling, died at San Francisco, January 23, 1932, age 33.
Salisbury, Samuel S., died at Los Angeles, February 1, 1932, age —.
Sampson, Jacob Henry, died at San Francisco, February 9, 1932, age 66.
Tillmanns, Ernest Gustav Nathaniel, died at Los Angeles, January 25, 1932, age 51.
Atkinson, Leonard Woods, died at Patton, February 27, 1932, age 73.
Cothran, Abraham Lincoln, died at San Jose, February 23, 1932, age 67.
Craycroft, Harry Judge, died at Fresno, March 18, 1932, age 55.
Durney, Charles Paul, died at San Jose, March 20, 1932, age 46.
Gerlach, August Alison, died at Oakland, March 15, 1932, age 34.
Cook, Joseph Wright, died in Persia in 1932, age 49.
Davidson, Anstruther, died at Los Angeles, April 3, 1932, age 72.
Kempff, Louis Adolph, died March 27, 1932, age 51.
Miller, Albert Leonard, died at Yuba City, March 22, 1932, age 61.
Reed, Wallace Allison, died at Covina, March 27, 1932, age 43.
McCoy, George W., died at Los Angeles, April 21, 1932, age 61.
Culver, George DeWitt, died at San Francisco, May 9, 1932, age 55.
Smith, Walter Edward, died at San Francisco, April 24, 1932, age 52.
Raiche, Bessica Faith Medlar, died at Santa Ana, April 9, 1932, age 56.
White, Carlos Moulton, died at Visalia, November 6, 1931, age 59.
Burns, Richard Earl, died at Castro Valley, May 24, 1932, age 48.
Heppner, Maurice, died at San Francisco, May 22, 1932, age 39.
Leas, John Augustus, died May 26, 1932, age 48.
Lockwood, Charles Daniel, died at Pasadena, June 11, 1932, age 64.
Milligan, Edward T., died April 1, 1932, age —.
Shinohara, Masakichi, died May 27, 1932, age 49.
Walker, Agnes, died at San Francisco, June 6, 1932, age 59.
Whiteway, Harold Morse, died June 7, 1932, age 67.
Wylie, Daniel Baldwin, died May 22, 1932, age 70.
Beck, Emil G., died at Oakland, July 1, 1932, age 66.
Iglick, Samuel, died July 7, 1932, age 78.
Johnson, Hans Coford, died July 8, 1932, age 48.
Magnusson, Herman Victor, died at Bell, July 1, 1932, age 56.
Dickson, Charles S., died at Riverside, May 23, 1932, age 83.
Arthur, Edgar Allen, died at Stockton, July 12, 1932, age 69.
Crandall, Henry Floyd, died at Oceanside, July 16, 1932, age 58.
Durand, Charles Joseph, died at Sacramento, July 7, 1932, age 46.
McKillop, John Edwin, died at Santa Monica, July 25, 1932, age 48.
Boller, Phillip, died at Los Angeles, August 29, 1932, age 45.
Coll, Daniel, died at Susanville, August 30, 1932, age 37.
Cotton, William Clement, died at San Francisco, August 21, 1932, age 50.
Deane, Tenison, died at San Francisco, September 1, 1932, age 66.
Friesen, J. Frank, died at Los Angeles, September 8, 1932, age 52.
Hagadorn, Jesse Lee, died at San Gabriel, September 5, 1932, age 60.
Wing, Peleg Benson, died at San Diego, August 12, 1932, age 72.
Mattison, Fitch C. E., died September 16, 1932, age 71.
Brenner, Charles Raymond, died at San Diego, September 17, 1932, age 45.
Brown, Page, died at Los Angeles, September 29, 1932, age 77.
Curtiss, Charles Lester, died at Redlands, September 27, 1932, age 54.
Fraser, Alexander Isaac, died at Bakersfield, October 6, 1932, age 64.
Hammond, Robert Ray, died at Stockton, October 2, 1932, age 58.
Mishkin, Jacob, died at Los Angeles, September 19, 1932, age 59.
Stevens, Burt Smith, died at San Francisco, October 7, 1932, age 58.
Burgeson, Daniel Leroy, died at Los Angeles, September 11, 1932, age 39.
Clark, William Amie, died at Rochester, October 28, 1932, age 61.
Kern, William B., died at Los Angeles, October 14, 1932, age 65.
Voisard, Francis Xavier, died at Sacramento, November 5, 1932, age 63.
Fenton, Susan J., died at Oakland, October 26, 1932, age 85.

* * *

Twenty-four obituaries were printed:

Margaret Mahoney	Charles S. Dickson
Selling Brill	Agnes Walker
Leonard Woods Atkinson	Charles D. Lockwood
Joseph Wright Cook	Charles Joseph Durand
Anstruther Davidson	Fitch C. E. Mattison
Ernest Gustave Tillmanns	J. Frank Friesen
George W. McCoy	Charles Lester Curtiss
George DeWitt Culver	Daniel Leroy Burgeson
Bessica Faith Medlar Raiche	Robert Ray Hammond
Carlos Moulton White	William A. Clark
Walter Edward Smith	Susan J. Fenton
Charles Paul Durney	Burt S. Stevens

The committee again urges every county society to appoint a committee on history to gather historical

papers of pertinent interest, so that the same may be available later for historical compilation.

Respectfully submitted,
Charles D. Ball, *Chairman.*

COMMITTEE ON HOSPITALS, DISPENSARIES AND CLINICS

Executive Group

John C. Ruddock, Chairman, 1935
Wallace Dodge, 1933 Karl L. Schaupp, 1934

To the President and the House of Delegates:

In compliance with the Constitution and By-Laws concerning the report of standing committees of the California Medical Association, the Committee on Hospitals, Dispensaries, and Clinics makes the following report.

During the year 1932-1933 there have been no formal meetings of the committee. During the year just completed, the chairman of the Committee on Hospitals, Dispensaries, and Clinics has been a member of the Executive Committee of the Department of Public Relations of the California Medical Association, and as such member has attended all meetings, with the exception of two, held by the Department of Public Relations.

The Committee on Hospitals, Dispensaries, and Clinics has submitted to the Department of Public Relations a bill, known as the Clinic Bill, to be intro-introduced in the California State Legislature at the present session. This bill has been carefully gone over by the Department of Public Relations and has been approved both by them and by the Council of the California Medical Association, and has been introduced into the California State Legislature and is now known as Assembly Bill No. 1277.

The committee feels that with the passage of this Act by the present legislature that they will have accomplished a very constructive program for regulation of the practice of medicine and have safeguarded the public against many forms of quackery which now exist under the designation of clinics, and institutions of like import.

Respectfully submitted,
John C. Ruddock, *Chairman.*

COMMITTEE ON INDUSTRIAL PRACTICE

Executive Group

Daniel Crosby, Chairman, 1934
Matt H. Arnold, 1933 Morton R. Gibbons, 1935

To the President and the House of Delegates:

The committee has been struggling with the question of x-ray fees, and it is hoped to have something submitted to the Council for its acceptance as a principle before the state meeting. Any report upon it prior to its acceptance by the Council we regard as premature.

Respectfully submitted,
Daniel Crosby, *Chairman.*

COMMITTEE ON MEDICAL DEFENSE

Executive Group

Henry Snure, Sr., Chairman, 1934
Fred R. DeLappe, 1933 George G. Reinle, 1935

To the President and the House of Delegates:

Prior to 1924 the California Medical Association furnished legal defense for all members of the Association, and from 1916 to 1923 offered an indemnity defense to any member who through special assessment desired this indemnity feature also.

Previous reports have explained in full the reasons for discontinuance of both the legal and the indemnity defense by the House of Delegates. They need not be retold in this report.

Following upon this decision of the House of Delegates, the Council permitted members who still wanted defense by the Association's legal counsel and their experienced confrères to secure such services in conjunction with those of the legal representative of the company in which such member carried commercial coverage.

This optional defense service is still available to members of the California Medical Association and may be had by members who carry indemnity with any one of the commercial companies that operate in California, viz., Aetna Life Insurance Company, Hartford Accident and Indemnity Company, Medical Protective Company, New Amsterdam Casualty Company, and the United States Fidelity and Guaranty Company. This service is secured by joining the Medical Society of the State of California.

Claims and cases made or commenced by a patient against a member for alleged negligence are in full charge of the chairman and secretary of the society, acting as attorneys-in-fact for each member. The chairman and the secretary are further empowered by each of the members to apply such part of the dues as may be necessary in their discretion to meet attorney's fees and costs of defense in any such claim or case.

The only new feature in this connection to report for the year 1932-1933 is the "group coverage" offered by the United States Fidelity and Guaranty Company, which is available to members of the society.

Members of the Medical Society of the State of California continue to express and record in the office their appreciation of and satisfaction with the service rendered by this organization. Members who desire detailed information can write for information and rates to the Association secretary.

Respectfully submitted,
Henry Snure, *Chairman.*

COMMITTEE ON MEDICAL ECONOMICS

Executive Group

John H. Graves, Chairman, 1935
Daniel Crosby, 1933 Lyell C. Kinney, 1934

To the President and the House of Delegates:

The committee has not conducted any independent investigation this year in regard to the economic status of doctors of medicine because the attention of the society has been focused on constructive insurance plans. The members, however, have contacted several of the county medical societies, the Southwest Pediatrics Society, and the Western Hospital Association, presenting to them the progress that is being made in California toward the more adequate distribution of medical care.

The activities of the Committee on Medical Economics are so merged with the Public Relations Committee that a separate report is unnecessary.

Respectfully submitted,
John H. Graves, *Chairman.*

COMMITTEE ON MEDICAL EDUCATION AND MEDICAL INSTITUTIONS

Executive Group

George Dock, Chairman, 1935
George Hunter, 1933 H. A. L. Ryfkogel, 1934

To the President and the House of Delegates:

I think the Committee on Medical Education and Medical Institutions can only report that it has kept the problems on the subject in mind, but cannot at present make a formal report.

It might be well if the deans of medical schools were given an opportunity of communicating their ideas and problems to the State Association from time to time. I would suggest that a new organization of the committee be brought about at the next meeting to include such officers.

I wish to report that all the members of the committee at present appreciate the honor and responsibility of their duties.

Respectfully submitted,
George Dock, *Chairman.*

COMMITTEE ON MEMBERSHIP AND ORGANIZATION

Executive Group

Harry H. Wilson, Chairman, 1935
Jesse W. Barnes, 1933 LeRoy Brooks, 1934
The Secretary, ex officio

To the President and the House of Delegates:

An active, aggressive campaign for membership should be instituted in each county unit this year.

Common danger and need has shown the value of organization, and it should be brought to the attention of every member of the California Medical Association and to every doctor of medicine eligible to membership that he needs the Association much more than it needs him.

The dues are incidental. The value of the voluntary services—not purchasable—of the working members constitutes the real worth of membership.

The medical and hospital service plan of the Public Relations Committee has been the most valuable factor in attracting interest in the California Medical Association.

The Legislative Committee of the State Association, working through the local committees, with a well organized plan, has tremendously impressed the non-members who have been awake to the danger of vicious legislation and aware of the valuable part the local county units and the California Medical Association play in protecting the public and the medical profession.

After approval, details of the membership drive will be published later.

Respectfully submitted,

Harry H. Wilson, *Chairman.*

COMMITTEE ON PUBLICATIONS

Executive Group

Percy T. Magan, Chairman, 1934
Frederick F. Gundrum, 1933 — Ruggles A. Cushman, 1935
The Editor, ex officio — The Secretary, ex officio

To the President and the House of Delegates:

The chairman of your Committee on Publications has endeavored to keep in touch with the scope and make-up of the various publications provided for in the by-laws of the California Medical Association. These are four in number, viz., the official journal—CALIFORNIA AND WESTERN MEDICINE, the annual directory, the *Pre-Convention Bulletin,* and the annual convention program.

As noted by the editor of CALIFORNIA AND WESTERN MEDICINE, the decisions concerning what papers presented at an annual session shall be published in CALIFORNIA AND WESTERN MEDICINE are quite difficult to make. The policy of giving preference to papers of not too technical a nature and on subjects appealing to a large group of California Medical Association members is one which appeals to us as being sound. An inspection of official journals of other state medical associations at once indicates that CALIFORNIA AND WESTERN MEDICINE must be recognized as among the first half-dozen best of such state medical society publications. We are in genuine accord with the policy of the editor in placing such insistent emphasis on topics of general medical economic interest and on papers having a special bearing on California and Pacific Southwest problems.

In these days of economic distress, it is also pleasing to note that the editor was able to secure from the printer, who has brought out the official journal during the last twenty-eight years, a reduction in printing costs of about $100 per month, as reported in the January 21 meeting of the Council.

The typographical form for the annual directory, which was devised by the editor to save printing costs, is also one which we feel is warranted in times such as the present.

The proposal to print the *Pre-Convention Bulletin* in the program number of the official journal in advance instead of after the annual session will no doubt be found to be an improvement.

In the annual convention program, the plan to give papers one general annual session numerical instead of separate section sequences, each starting with figure one, should make for easier reference.

In conclusion we would state our opinion, that the official journal should be maintained on the high standards of the past, because in the end it is the most tangible and material expression which many members who do not attend local or state society meetings receive in return for their State Association dues. It is the contact medium between the State Association and its members.

We hope that the scientific studies and researches of California physicians will be of increasing value, and that the publication of such papers in the official journal will enhance its own reputation, as well as that of the California Medical Association.

Respectfully submitted,

Percy T. Magan, *Chairman.*

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Executive Group

Junius B. Harris, Chairman, 1935
Fred R. DeLappe, 1933 — William Duffield, 1934
The President, ex officio — The President-Elect, ex-officio

To the President and the House of Delegates:

More than two hundred bills affecting the medical profession either directly or indirectly were introduced during the first half of the present legislative session. Since the opening of the second half of the session on February 28 several additional bills of interest to the profession have been introduced and a number of the skeleton bills have been filled in. However, at the present writing there are more than fifty of these skeleton bills still open and they may be filled in at any time with measures of vital concern.

During the legislative recess, meetings were held in San Francisco and Los Angeles with members of the Council, committeemen and allied groups at which your chairman brought to their attention some of the measures most vitally affecting medical practice and public health. At these meetings it was interesting to note that at least one member of the profession, and in many instances large committees, had studied bills assigned to them and were able to give very constructive suggestions. This basic work on the part of individual members of the Association has been exceedingly helpful to your representative in discussing legislation in Sacramento. Noteworthy is the activity and cooperation of the Public Health League of California and the League of Medical Voters.

At this writing, Senate Bill 953 by Senator Fellom, relating to organization and operation of hospital associations, has been tabled in committee. Senate Bill 674 by Senator Fellom ("antivivisection measure") was passed out of committee without recommendation and is on the floor of the Senate for vote. Senate Bill 160 by Senator Seawell, regulating hospital associations, has not yet been heard before the committee. Senate Bill 782 by Senator Mixter, permitting the reception of pay patients in county hospitals, is also still in committee. Assembly Bill 1306 by Mr. Dempster, establishing a State Board of Naturopathic Examiners, has been tabled in committee. Assembly Bill 1159 by Mr. Gilmore on the same subject has not been heard before the committee. Assembly Bill 795 by Mr. Craig, relating to x-ray technicians, is still resting in committee, as are Assembly Bill 900 by Mr. Rawls, permitting chiropractors to care for the injured under the Workmen's Compensation Act, and Assembly Bill 1740 by Mr. Maloney, requiring appointment of chiropractors in all institutions receiving financial assistance from the state. Assembly Bill 1277 by Mr. Neilsen, for regulation of clinics, is now being amended to cover certain technicalities and will be argued before the committee at an early date.

One of the most outstanding features of the legislative session has been the tremendous interest and opposition to Assembly Bill 2190 by Mr. Bliss which would permit county supervisors to admit pay patients to county hospitals. The enormous tax burden that would result from such procedure brought a veritable flood of protests from taxpayers from all sections of the state. Mr. Bliss requested a conference of all interested parties to work out a compromise. This is now under way.

Above are only a few of the measures that require the constant attention of your members of the Legislative Committee. There are scores of additional bills that must be watched from day to day. There are Legislative Committee meetings morning, afternoon, and evening being held in the State Capitol, and it is

very essential that the committee procedure be carefully watched, as amendments are frequently introduced which vitally concern our profession.

Your chairman is impressed at this session of the legislature by the average high type of legislator selected by the voters to represent them at this session. Safeguarding the interests of public health are two outstanding lawmakers. The Honorable Dan E. Williams, chairman of the Senate Committee on Public Health and Quarantine, and the Honorable Melvyn E. Cronin, chairman of the Assembly Committee on Medical and Dental Laws.

Your chairman will make a complete report at the councilors and officers' luncheon at Del Monte on Tuesday, April 25, immediately following the general session.

Respectfully submitted,

Junius B. Harris, *Chairman.*

COMMITTEE ON SCIENTIFIC WORK

Executive Group

Emma W. Pope, Chairman
F. M. Pottenger, 1933 Lemuel P. Adams, 1934
J. Homer Woolsey, 1935
Fred H. Kruse, ex officio
E. Eric Larson, ex officio

To the President and the House of Delegates:

The Committee on Scientific Work has held two meetings—one a committee meeting alone, and one with the representative officers of each section present. By personal endeavor and correspondence, what we believe to be our finest scientific program has been evolved.

The committee, with the representative section officers, having in mind the subjects desired for presentation, have been able to select visiting speakers interested particularly in the subjects under discussion. A very representative group of invited guest speakers has been secured.

This year the scientific program embodies several symposia, which are so arranged as to bring to our membership the very latest and best on timely medical subjects. In addition, the program arrangement has been adjusted so as to best fit the needs of the majority in attendance at the respective sections.

A meeting has been scheduled of the newly elected section officers with the members of this Committee on Scientific Work for luncheon on Wednesday noon, at which time a start will be made on the scientific program for the annual session of 1934.

Respectfully submitted,

Emma W. Pope, *Chairman.*

REPORTS OF COMMISSIONS, SPECIAL AND COUNCIL COMMITTEES

COMMITTEE ON PUBLIC RELATIONS

Charles A. Dukes, Chairman, Cancer Commission.
Fred B. Clarke, Chairman, Committee on Health and Public Instruction.
Daniel Crosby, Chairman, Committee on Industrial Practice.
Junius B. Harris, Chairman, Committee on Public Policy and Legislation.
John C. Ruddock, Chairman, Committee on Hospitals, Dispensaries and Clinics.
Harry H. Wilson, Chairman, Committee on Membership and Organization.
John H. Graves, Chairman, Committee on Medical Economics.
Joseph M. King, ex officio, President of California Medical Association.
George G. Reinle, ex officio, President-Elect.
Emma W. Pope, Secretary.
Hartley F. Peart, Attorney, Legal Counsel, California Medical Association.
Walter M. Dickie, Director, Department of Public Relations.

To the President and the House of Delegates:

The Committee on Public Relations of the California Medical Association has held nine meetings during the past year—four in Los Angeles, and five in the offices of the Association in San Francisco. Dr. John Graves served as chairman of the committee until the meeting of September 24, 1932, at which time he submitted his resignation, and Dr. Charles A. Dukes was elected to succeed Doctor Graves as chairman.

The committee's program for the past year has been confined principally to the following major activities:

(1) The economic study of medical service plans and the formation of a plan which would be suitable for component county medical societies which desire to institute a plan for medical care on a periodic payment basis.

(2) The study and formation of necessary legislation for the standardization of clinics and dispensaries.

(3) The guidance of and assistance to component county societies of the state which are interested in the establishment of a medical service plan.

(4) A survey of county hospitals, with special reference to pay and part-pay patients.

(5) Instruction in medical economics through the medium of publications, addresses by committee members to the various county medical societies and other interested groups, fair exhibits, etc.

Taking these up in detail,

(1) The committee has formulated certain underlying principles which it feels should be incorporated in any plan medical service instituted by a county medical society or group thereof which the committee should be called upon to endorse. Four types of service, including medical service, medical and surgical service, hospital care, singly or combined, have also been outlined by the committee.

A special committee, consisting of Doctors Wilson and Dickie and Mr. Peart, was appointed and instructed to prepare the necessary legal forms for the institution of a medical service plan suitable to each particular type of service. The principles, plans of organization, and types of service were submitted to the Council with recommendation of the committee, and were adopted on September 24, 1932, with slight revision and the adoption of an additional principle.

The detailed plan for medical and hospital service, with the principles and forms embodied therein, was published in a bulletin issued by the committee and sent to the membership of the Association in February of this year.

(2) The chairman of the Committee on Hospitals, Dispensaries, and Clinics submitted to the committee a report on the proper legislative program for the control of clinics, with the idea of introducing a bill into the legislature. This report was turned over to the Association's legal counsel to be drafted into a legislative bill, and the same was introduced in the first half of the legislative session by Assemblyman Neilson as Assembly Bill 1277.

(3) In coöperation with the Committee on Public Relations, and through their own efforts, several component county medical societies or groups thereof have formulated and adopted or otherwise shown interest in medical and/or hospital service plans. Alameda County Medical Society has placed in operation a medical and hospital service plan, an account of which was published in the committee bulletin under date of February 15, 1933. San Diego County Medical Society has established a Central Clinic Service, based on the committee's plan, and is further considering the adoption of hospital insurance. A report of the Clinic Service for persons of moderate means was published in the February issue of CALIFORNIA AND WESTERN MEDICINE under the section devoted to the Department of Public Relations.

(4) In making a study of county hospitals the committee finds that the public institutions of the state are at this time hospitalizing 52 per cent of the population and that in many counties the percentage runs as high as from 85 to 90 per cent. This may be due in part to the present economic conditions; however, the committee finds a decided trend toward the utilization of county hospitals for pay patients, which they believe to be a wrong and unnecessary burden upon the taxpayer, as well as the medical profession.

(5) The committee has endeavored to keep the members of the Association and others interested in

medical economics informed as to its activities through various communications and bulletins issued to the membership from time to time; and a general discussion of medical economics has appeared in each issue of the Association's journal, CALIFORNIA AND WESTERN MEDICINE.

Educational exhibits were installed at the State Fair in Sacramento and the Los Angeles County Fair in Pomona.

The chairman, the director of the Department of Public Relations, and the individual members of the committee have visited many of the component county medical societies upon request, and have presented the various plans of the committee and advised concerning the medical economics problems of each particular community. In visiting the societies the committee members have not only done so cheerfully, but at their own time and expense.

If the Committee on Public Relations has made no other contribution, it has at least stimulated the study of medical economics in the ranks of the profession; and in the establishment of public relations committees in many of the county medical societies of the state, has placed these societies in a much better position to recognize and meet their own particular problems.

Respectfully submitted,
Charles A. Dukes, *Chairman.*

CANCER COMMISSION

Executive Group

Charles A. Dukes, Chairman
Lyell C. Kinney, Vice-Chairman
Alson R. Kilgore, Secretary

Harold Brunn — William Ophüls
Henry J. Ullmann — Orville Meland
Clarence G. Toland — A. Herman Zeiler

To the President and the House of Delegates:

The first major program of the Cancer Commission has been carried well forward toward completion during the year. Studies by subcommittees have been completed on gynecologic tumors, breast tumors, genito-urinary tumors, the general radiology report, eye, ear, nose and throat tumors, and have appeared in CALIFORNIA AND WESTERN MEDICINE. Others are in preparation and the list will be completed by late summer or early fall.

These studies appear to be of greater educational value than had been anticipated. The process of their preparation by committee and conference work has resulted in a diffusion of ideas and experience among members in various specialties which could have been accomplished in no other way.

They have also brought sharply to attention that on many fundamental points in the handling of cancer there are still irreconcilable differences of opinion. Some of these have been made the subject of research to the extent of ascertaining by correspondence the present practice of the important cancer centers of the world, thus bringing to the profession a digest of world experience not obtainable in medical literature.

Upon completion of the series, publication in collected reprint form is planned so that every member of the California Medical Association may have them for reference.

Incidentally, this method of approach has attracted wide and favorable attention outside California.

In addition to this study work, meetings of fourteen county and joint county societies, as well as the Nevada and New Mexico State Medical Associations, have been addressed by representatives of the Commission, and a full day of x-ray and pathologic conferences has been arranged for Sunday, April 23, in connection with the Del Monte meeting of the California Medical Association.

The Commission's next major program is to encourage the establishment of cancer clinics at appropriate centers in the state. This will be carried out directly through the local county societies involved. It is expected that the next year will be largely occupied with this work.

A condensed statement of expenditures for the year to date follows.

January 1 to December 31, 1932

Budget allowance by Council		$4,500.00
Rent	$ 450.00	
Salary	1,080.00	
Miscellaneous supplies	437.95	
Transportation	204.13	
		$2,172.08
Appropriation unused		$2,327.92

Respectfully submitted,
C. A. Dukes, *Chairman.*

AUDITING COMMITTEE

Executive Group

T. Henshaw Kelly, Chairman
Morton R. Gibbons — Karl L. Schaupp

To the President and the House of Delegates:

The Auditing Committee has scrutinized all the expenditures of the Association during the year 1932 and has approved, as set forth in the Constitution and By-Laws, all expenditures that were properly authorized.

The books of the Association have been audited and found correct by Hugh Ross, certified public accountant.

In consideration of the fact that a committee has been appointed by the Council to resurvey the expenditures of the Association and that that committee's report will be acted upon by the Council, the Auditing Committee feels that it need not burden the House of Delegates with any more extensive report.

It wishes to commend the secretary-treasurer and her assistants for the careful and accurate accounts that have been kept.

Respectfully submitted,
T. Henshaw Kelly, *Chairman.*

COMMITTEE ON ANNUAL SESSION ARRANGEMENTS

Executive Group

William Gratiot, Chairman
Spencer Hoyt — Alfred L. Phillips
John A. Merrill — T. Henshaw Kelly

To the President and the House of Delegates:

Because of present economic conditions no special entertainment other than that given following the president's dinner has been provided by the Association. Members will no doubt arrange their own parties and trips to fit in with joint convenience.

Del Monte affords many amusements to occupy the spare moments of the convention. Golf, tennis, swimming, fishing, scenic drives, and other entertainment may be arranged at any time.

Dr. Harry Alderson is golf chairman, and has made arrangements for members to participate in the golf tournament of the Northern California Golf Association on Saturday, April 22, and Sunday, April 23, preceding the annual session.

Busses and cars will be furnished for the drives upon application. Notice of moving pictures and other entertainment will be given at the time of the convention.

The entertainment for the president's dinner will be simpler than previous years, but we hope will meet the approval of those present.

Respectfully submitted,
William Gratiot, *Chairman.*

SPECIAL COMMITTEE ON CLINICAL AND RESEARCH PRIZES

Executive Group

George Dock, Chairman
Eugene S. Kilgore — Arthur L. Bloomfield

To the President and the House of Delegates:

Eight papers have been submitted this year in the prize contest and are being studied by the members of the committee. A final report with recommendations for the awards will be submitted to the Council at the annual meeting, and announcement of the winners of the prizes will be made at the meeting of the House of Delegates.

The quality of the manuscripts submitted this year is very good, and the committee feels that the State Association will do well to continue the prizes.

Respectfully submitted,
George Dock, *Chairman.*

C. M. A. DEPARTMENT OF PUBLIC RELATIONS

An open forum for progress notes on the department's activities, and for brief discussions on medical economics. Correspondence and suggestions invited. Address Walter M. Dickie, Room 2039, Four Fifty Sutter Street, San Francisco. This column is conducted by the Director of the Department.

The Battle Creek Plan for Medical Care of the Indigent—The Academy of Medicine and Dentistry*

For more years than we like to remember, the subject of the care of the indigent has been a bone of contention between the doctors and county poor commissioners and other relief agencies. Since the state or the next government unit, the county, city or township, is responsible by law for medical care as well as material relief for its indigent citizens, the problem of furnishing adequate medical service should offer no serious difficulty, provided there is willingness on the part of both parties to get together on a humanitarian basis and in the spirit of coöperation. Without the benefit of a well worked out plan or system, medical relief often becomes the pawn of those political departments of government assigned to relief work. These agencies could not be expected to impartially rotate the service among all the doctors, although, as tax-paying citizens, they contribute their share of public funds for relief purposes.

The age old traditions and ethics of the medical profession are not easily adaptable to any sort of bargaining. Only in the case of sickness among those unable to pay, will doctors consider the subject of contract practice. During the last year, 1932, in Calhoun County with a population of 85,000, the plan of hiring a full time physician to care for the indigent cases was tried out and the medical care of county cases was turned over to a doctor imported for that purpose. On account of the volume of work, no matter how well trained the doctor, it would be impossible for him to fulfill all the requirements and demands made upon him to cover all the specialties of the present day practice.

It was soon discovered that he could not, in addition to being an internist, fill the shoes of surgeon, an orthopedist, an obstetrician, a pediatrician, an eye, ear, nose and throat specialist, etc. As a result, the economy of hiring a one man county doctor did not meet expectations, for the county had also to pay for help from various specialists employed to meet the needs of the occasion. The total cost of furnishing care to the worthy indigents was, in the aggregate, just as much as it had been in other years. With a strange doctor, many of the poor people refused to submit themselves to his care largely through lack of confidence. They wanted their own doctor and in many cases got him and received the usual care at his hands, but with no hope of rendering pay to him for his services.

THE UNIT SYSTEM

Under the old system each county acted through its supervisors and its poor commissioners as the relief agency to furnish material relief and medical care to the indigent residents of the county. With the passage of the new law the indigent relief has become a problem for each city and township. Confronted with this situation the city of Battle Creek was open to suggestions as to the most effective method of caring for the indigent sick.

Accordingly a meeting of Battle Creek physicians and dentists was called, November 10, 1932, which resulted in the formation of the Battle Creek Academy of Medicine and Dentistry, a nonprofit nondividend corporation. Their first undertaking was to obtain the facts as to the number of cases treated in other years, and the aggregate costs to the county for their medical care. These figures, through the free coöperation of county officials, were made available and were taken as a basis for an estimate for future service. Based upon these findings, a contract was made with the city to furnish medical care, with ordinary medicine and including surgery, to the indigent sick in Battle Creek for the year 1933, for the sum of $12,000, payable in semi-monthly installments of $500.

The next vital question to settle was the problem of determining the economic status and worthiness of the families requiring attention.

SOCIAL WORKER

The Academy of Medicine and Dentistry has its own investigating committee, who, with an experienced social worker and former county nurse, whom they employ at their own expense, together with the city appointed director of relief, served the interests of both doctors and the city by investigating the worthiness of each case. The plan of action is carried out as follows:

Each member of the academy who has an office or house call from a family or individual who appears to be unable to pay for service, or who already is receiving fuel, food or rent from the city, would at once render first aid with no questions as to forthcoming pay. He at once makes his report, on a special notification card, to the academy headquarters, and the visiting nurse, together with the relief director employed by the city, investigate and, if found worthy, the doctor continues to give medical care until the patient recovers. If unworthy, the doctor would treat the patient as any other private patient. At the end of the month he sends an itemized statement to the Auditing Committee of the academy. This bill for service is rendered at the usual prices for such service in this city. The Auditing Committee discounts the bill 50 per cent and then at once pays the doctor half of the discounted bill, or 25 per cent of the original bill. The rest of the account remains unpaid until the end of the year, when any remaining funds available would be prorated up to the amount of the unpaid balance of each doctor's bill. The expense of hospitalization, special orthopedic appliances, insulin vaccines and a few other specials are not included in this plan, but are specially provided for by the city.

AIMS

The Academy of Medicine and Dental Service is devised to fulfill definite objectives and ideals; among them are the following:

1. To preserve to the private practice of medicine and dentistry its individualism, its incentive to scientific excellence, its reward for that excellence, the free choice of doctor or dentist to remain with the patient, and to see that the emoluments for service are equitably distributed.

2. To provide the sick poor in the present emergency with the same quality of service and tender care as can be had upon the usual fee-for-service basis.

3. To encourage the free use of consultation service in special or obscure cases.

4. To return the practice of medicine and dentistry to the local doctors and dentists, where it rightfully belongs.

5. To forestall or replace various systems of medical care established for profit through lay or contract practice.

* Reprinted from the *Journal of the Michigan State Medical Society*, March, 1933.

6. To provide a means whereby temporarily financially embarrassed sick people may call upon their own family doctor without being humiliated.

7. To promote disease prevention by the process of public education, and by the exchange of ideas upon the latest scientific methods of treatment.

8. To restore the confidence of the patient in the high ideals and purposes of organized medicine.

9. To endeavor to prevent financial embarrassment of large numbers of citizens from developing into chronic pauperism.

The Academy of Medicine and Dentistry is the result of an effort on the part of the medical and dental professions of Battle Creek to extend to the limit their professional coöperation in the present emergency. It is also an effort to forestall state medicine by answering the question as to whether or not these professions can submerge their own interests in behalf of the health of the indigent public.

While the academy is now in actual operation, it is yet too soon to say how perfectly it will function. It doubtless has many weaknesses, but it is expected that these will be corrected as soon as they appear. The number of cases passed by the investigating committee for medical care during its first month of existence suggests that a huge epidemic is raging. However, this apparent rush of business is explainable on the ground that all those registering at the city welfare headquarters are given carte blanche service by the academy members in case of sickness. After a few months, or possibly not until the end of the year, will it be possible to pass judgment on how well it fulfills its mission. Careful records of cases by the social worker, and systematic accounting of its funds are being kept by an expert accountant and, as the experiment unfolds, one may hope for a wealth of facts upon which to guide in other experiments of this kind.

Battle Creek is a city of 50,000 population, and has forty-five physicians and twenty-seven dentists in active practice, who are members of the academy.

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*The Place of Local Government in Public Health Organization**.—Facilities, adequate perhaps for the application of knowledge in former eras, break down in the effort of applying modern knowledge. Shall we continually blind ourselves to the need for better methods of public health administration methods specific in character, and by our wilful blindness continue to deprive the people, for whose welfare we are responsible, of protective service which may be made readily available?

Necessarily the work of any health organization is highly technical in character. It follows that in this highly specialized field the service of specialists is essential to the effective development of specific services as related to specific problems. The day of the "shot-gun" measure for a public health problem is past, as certainly as the day of the "shot-gun" prescription in the practice of medicine.

In developing any public health organization, in all fairness to appropriating bodies and to the public for which appropriations are made, we must constantly have in mind the rendition of a maximum service for a minimum cost, and this is possible only through the utilization of qualified personnel especially trained for this very technical field.

The federal government may properly be concerned with protection from exotic diseases, with the interstate spread of disease, and coöperate with the states through consultation service, actual aid by the assignment of specially trained personnel, and in other ways assist state organizations. It may profitably engage in major research either in the causes and conditions of disease and health or in administrative procedures.

The state may exercise its inherent police power through the promulgation and enforcement of public health regulations, may perform for reasons of business efficiency a few direct services, such as the registration of vital statistics, may aid local governments in the formation of local health services, may supply expert consultant service, may engage in research, particularly that type of primary intrastate interest, and may perform many other functions; yet the state cannot administer the health functions of a local government as effectively as can the local government in coöperation with the state.

The local government is that element closest and most responsive to local conditions and local needs. It is, therefore, the unit best fitted to render the direct and immediate community service that is the very foundation of any public health program. Upon it falls the responsibility of preventing rather than controlling epidemics, of creating conditions which interpose permanent barriers in the way of disease; of health education that truly leads out of misunderstanding to knowledge of principles which elevate health standards; of constantly standing guard that disaster may not even threaten; and of being the "family physician" to the health of the community. Indeed it must be plain to any student of public health administration in this country that the personnel of local health departments are the general practitioners of public health and that state and federal organization must, in many respects, serve essentially the same purpose as the consultant in the medical field.

If we grant the soundness of these simple principles, it immediately follows that local health work must be put upon a whole-time basis; otherwise there is no incentive to special qualification.

The history of full-time local health work in both the urban and rural fields amply supports the conviction that maximum efficiency is reached only through organization on such a basis with a sufficiently large supporting population and taxing unit of government to provide at least the primary units for a balanced organization. The evidence also supports the conclusion that the county is usually the smallest unit of government in rural areas that will meet the requirements as to size of population and taxable resources. —*Health News.*

*Abstract of an address by E. L. Bishop, M. D., State Commissioner of Health of Tennessee, read at the Annual Conference of Health Officers and Public Health Nurses at Saratoga Springs, Wednesday, June 29, 1932. To appear in full in the New York State Journal of Medicine.

Birth Control.—Though the birth control movement has encountered much ecclesiastical opposition, it has received support in influential social and medical circles. The annual report of the Society for the Provision of Birth Control Clinics shows that there are now sixteen affiliated centers throughout the country and during its ten years' work advice has been given to 38,000 persons. It is claimed that in this time of unemployment the need for the centers is greater than ever and that letters received from women who live in areas remote from the clinics show the necessity for widespread extension of clinics and for the training of medical students in contraceptive measures, which few now receive. The society is doing its best to train as many students and physicians as possible.

The report of the medical officers of the clinics states that notwithstanding the holding of the International Birth Control Conference at Zurich in 1930, they found no grounds for changing the methods followed at the clinics for seven years, which are substantially the same as those of Mrs. Margaret Sanger's clinic in New York. The ideal contraceptive has not yet been discovered.—*London News Letter.*

Digestive Leukocytosis.—Garrey and Butler are of the opinion that the low basal leukocyte count of the resting state is unaffected by the intake of large quantities of either protein or carbohydrate. Sudden distention of the human stomach, or abrupt changes in gastric temperature, due to hot or cold fluids, cause an immediate but mild and transient rise in the leukocyte count. Animal experiments indicate that these reactions are due solely to reflex vascular disturbances, but have no relation to the absorption of digest. All experiments indicate that there is no digestive leukocytosis in normal adults.—*American Journal of Physiology.*

CANCER COMMISSION OF THE C. M. A.

The Cancer Commission was brought into being by the House of Delegates of the California Medical Association to aid in the furtherance of all efforts to combat cancer. The roster of officers and the central office of the Commission to which communications may be sent is printed in this issue of California and Western Medicine (see front cover directory). This column is conducted by the Secretaries of the Commission.

CANCER COMMISSION PROGRAM*

Del Monte Annual Session
April 23 to 27

In connection with the California Medical Association 1933 annual session, the Cancer Commission will hold a day of demonstrations on Sunday, April 23, from 10 a. m. to 5 p. m., at the Hotel Del Monte. A notice of the meeting rooms will be posted in the hotel lobby.

* * *

Microscopic Pathology Conference

Following the plan of the successful Microscopic Pathology Conference held at Los Angeles in connection with the 1932 California Medical Association annual session, a similar conference is planned this year. Members in attendance will be given opportunity to study and make diagnoses on microscopic slides of cases presented. The program will include a different group of tumors from that presented last year; and in order to make the conference more interesting, both for pathologists of experience and for surgeons and others in clinical fields who are "amateur" pathologists, not only will typical specimens of certain groups of tumors be included, but a number of unusual cases in unrelated fields will be presented for diagnostic interest.

The sequence of demonstrations is as follows:

MORNING

10:00-11:00 a. m.—Connective Tissue Tumors, George D. Maner.
11:00-11:20 a. m.—Case, Edwin I. Bartlett.
11:20-12:20 p. m.—Endothelioma, David A. Wood.
12:20-12:40 p. m.—Case, A. M. Moody.
12:40-1:00 p.m.—Case, G. Y. Rusk.

AFTERNOON

2:00-2:40 p. m.—Stomach Cases, C. E. Nixon.
2:40-3:00 p. m.—Case, Frederick Proescher.
3:00-3:40 p. m.—Colon Cases, James B. McNaught.
3:40-4:00 p. m.—Case, Robert A. Glenn.
4:00-5:00 p. m.—Kidney Cases, E. H. Ruediger, H. A. Ball.

Microscopes.—Inasmuch as the conference will be held at Del Monte instead of at a teaching laboratory, it will be necessary to ask each member in attendance to bring his own microscope. In order to allow space for microscope work, it will be necessary to limit the number in attendance.

Registration.—The members desiring to attend should register promptly with the secretary of the Cancer Commission, A. R. Kilgore, or the chairman of the Extension Committee, Z. E. Bolin, 450 Sutter Street, San Francisco. It is requested that members do not reserve places unless they can be present at both morning and afternoon sessions. The program will be a full one and it will be necessary to start promptly at 10 a. m.

* * *

Radiology Diagnostic Conference

A demonstration in radiologic diagnosis along similar lines is also planned. Case histories will be briefly presented, roentgen-ray films will be then placed in view boxes distributed conveniently about the room and time for study of the films by each member allowed. After members have had opportunity to make their own diagnoses from the films, the case and its radiological features will be discussed by the demonstrator. Each case is expected to occupy about twenty minutes and as the program is a full one, it will be necessary to begin promptly at 10 o'clock.

Registration.—In order to avoid crowding and give opportunity for all in attendance to have ready access to films to be studied, it will be necessary to limit the number in attendance. Members desiring to be present should register promptly with the secretary of the Cancer Commission, A. R. Kilgore, 450 Sutter Street, San Francisco, or with the chairman of the committee in charge of the demonstration, I. S. Ingber, 490 Post Street, San Francisco.

The sequence of roentgen-ray demonstrations follows:

MORNING

10:00-11:00 a. m.—Stomach Cases, Milton J. Geyman.
11:00-12:00 noon—Colon Cases, L. H. Garland, A. C. Siefert.

AFTERNOON

2:00-3:00 p. m.—Chest Cases, R. G. Taylor, Frank S. Dolley.
3:00-3:40 p. m.—Brain Cases, R. S. Stone, O. W. Jones, Jr.
3:40-5:00 p. m.—Bone Cases, L. C. Kinney, I. S. Ingber, Henry Snure, R. R. Newell.

* * *

Sunday Evening Public Meeting

On Sunday evening, April 23, at 8 p. m., at the Hotel Del Monte a meeting to which the public as well as members of the medical profession are invited will be sponsored jointly by the Woman's Auxiliary to the California Medical Association and the Cancer Commission. The program planned is as follows:

Arresting Cancer. A report of results obtained by cooperative attack at the Highland Hospital. Lantern slide presentation of cases.—C. A. Dukes, chairman of the Cancer Commission.

The Commission's Survey of Cancer Diagnosis and Treatment.—A. R. Kilgore, secretary of the Cancer Commission.

Program of the Cancer Commission for the Establishment of Special Cancer Services in California.—Lyell C. Kinney, vice-chairman of the Cancer Commission.

* * *

Cancer Features in Section Programs

In addition to the above programs, attention is directed to the following cancer features during the regular convention program.

Monday, April 24, 2 to 5 p. m.—Symposium on the radiologic treatment of cancer, at the first meeting of the Radiology Section.

Paper on cervical cancer, Obstetrics and Gynecology Section.

Paper on manifestation of arsenic poisoning, Dermatology and Syphilology Section.

* In the official Del Monte program the Cancer Commission program will be found listed in the Section Index. In California and Western Medicine this program is printed in lieu of report copy.

Tuesday, April 25, 8:30 to 11:30 a. m.—Symposium on lesions of the colon, at a joint meeting of the Radiology and General Surgery Sections.

Paper on tumors of the testis, Urology Section.

Paper on skin lesions in association with agranulocytosis, Dermatology and Syphilology Section.

Wednesday, April 26, 8:30 to 11:30 a. m.—Paper on cancer of the stomach, at the meeting of the General Surgery Section.

Paper on anemia of gastric cancer, joint meeting of General Medicine and Pathology and Bacteriology Sections.

Thursday, April 27, 8:30 to 11:30 a. m.—Paper on retinal glioma treated by radium therapy, at the Eye, Ear, Nose and Throat Section.

* * *

Cancer Commission Committee Meetings

On Tuesday afternoon, April 25, at 2 p. m., meetings for final discussion of the reports of the Committees on Chest Tumors and Skin and Mouth Tumors will be held at the Hotel Del Monte—Chest Tumors in the Bali Room, and Skin and Mouth Tumors in the Tower Room. Members interested in the discussions will be welcomed.

A meeting of the Pathology Committee will be held on Tuesday at 2 p. m. in Children's Play Room No. 1.

Members of the Cancer Commission will hold an executive meeting on Wednesday, April 26, at 2 p. m. in the Tower Room.

Sensitization and Roentgen Rays.—Recent statements regarding the combination of isamine blue and of erythrosin with roentgen therapy have aroused renewed interest in such combination treatment. The idea of using dyes is based upon the observation made many years ago that certain coloring matters extended the range of sensitivity of a photographic plate and this in turn led to analogous studies on living matter. It was found, by the use of certain very dilute aqueous solutions of fluorescing dyes that paramecia could be rendered more sensitive to visible light. While a rough analogy may be assumed between the sensitizing of silver bromid by erythrosin and the sensitizing of protozoa by the same substance, it was shown by Tappeiner and others, about 1900, that the analogy was not very close for, in addition to the sensitization to light, the dyes also produced a certain amount of damage, even if the protozoa employed were never exposed to light. In other words, the sensitization is accompanied by a slightly lethal effect. The effects, therefore, observed after exposure to light were not wholly physical, but partly toxic.

Over thirty years ago attempts were made to increase the therapeutic action of x-rays by injecting into or painting the surface of tumors with various fluorescent dyes, such as eosin and its related compounds. Quinin, which also fluoresces, was injected into the tissues. Experiments were also carried out with protozoa, which, after suitable exposure to the dye or other substances, were exposed to roentgen or radium rays, without demonstrable effect. The upshot of all this experimentation was that the use of fluorescent substances did not increase the effectiveness of radiation of short wave lengths.

With the discovery by Barkla, about 1907, of the secondary characteristic rays produced by the exposure of metallic materials in the path of a beam of radiation, it was natural to test the effect of the introduction of salts or colloids of the heavier metals in increasing the biological action of radiation. Barkla himself made this attempt, and in 1911 Hernaman Johnson administered finely divided silver. In other cases solutions of silver nitrate were injected. He thought he could detect some beneficial results. Other students employed colloidal silver and ammonium and strontium bromid injected into tumors. Miller injected colloidal iridium, vanadium, and cobalt into tumors, and then rayed them, but the results of all of this experimental work were not striking. The injection of thorium nitrate gave some results, but evidently due to the toxicity of the material, and not to the secondary radiation.

From the theoretical standpoint it appears that the presence of a moderate number of fine metallic particles distributed throughout the tumor should have but little effect. The range of the ionizing electrons in the tissues is very small, only the thickness of a few cells, so that the radiating particles must be evenly distributed to give a homogeneous action. Mayneord has estimated that at least one milligram of metal per cubic centimeter must be present to have any effect, and such concentration is practically impossible to obtain. A practical experiment on this side of the question has been carried on by Wood, who showed that colloidal gold injected in large quantities into animals did not decrease the quantity of x-ray necessary to destroy the cells of a tumor. With maximum permissible quantities of colloidal lead, on the other hand, a slight diminution, amounting to about 10 per cent of the necessary radiation dose, was noted. Wood explains this observation by the combined toxic and radiation effect, and not as a result of secondary scattering. It is probable, therefore, that any results which have been obtained clinically, either by sensitizing the tissues with dyes, or by injecting into them particles of heavy metal to act as radiators, are due not to any increase in the effectiveness of the x-ray, but rather to a combination of the lethal effect of the dye or the heavy metal with the lethal effect of the radiation.—Abstracted from editorial, *American Journal of Cancer,* Vol. 16, pp. 923-926, 1932.

The Production of Artificial Immunity to Cancer.—The results of a series of experiments on immunity to transplanted tumors in mice indicate that the produced immunity against tumors does not confer immunity against all tumors, but only against the particular tumor which is the subject of the experiment.

Further experiments have been carried out to test the effect of hereditary characters in producing immunity, or otherwise, in mice to tar warts. It was found that by interbreeding mice which tend to develop tar warts early, a stock can be obtained that develop warts much earlier than the ordinary stock-bred mice. —Ninth Annual Report, British Empire Cancer Campaign, 1932.

Standards of Treatment.—The prestige of the cancer specializing institute is due probably in large part to its physical equipment, but its actual superiority rests in its more active interest in the general tumor problem as well as the greater care with which pathologic material and clinical records are handled. The relative deficiencies of the smaller clinic appear from our study to be chiefly those of the occasional clinical or pathological error in diagnosis due to a lack of complete attention to the tumor problem and, above all, to the absence of a systematized plan of therapy, which permits some cases to be undertreated. The mere consciousness of the defects, however, should result to a large degree in their elimination.—Taylor, H. C., Jr., *American Journal of Cancer,* Volume 15, 1931, page 2559.

Tobacco Smoking as a Cause of Cancer.—Certain tars have been extracted from tobacco during its consumption in wooden and clay pipes in conditions resembling as closely as possible those met with in ordinary smoking. The yield of tar varied with the kind of tobacco used. Quantities of from five to fifteen grains were obtained from the combustion of a pound of tobacco. The tars were distilled and, after being rendered nontoxic, were applied to mice in alcoholic solution. Out of a large number of mice so treated only one developed cancer. It is probable that this isolated case was unconnected with tobacco-tar; the conclusion is justified that tobacco smoking plays little or no direct part in the production of cancer.—Ninth Annual Report, British Empire Cancer Campaign, 1932.

STATE MEDICAL ASSOCIATIONS

This department contains official notices, reports of county society proceedings and other information having to do with the state associations and their component county societies. The copy for the department is edited by the state association secretaries, to whom communications for this department should be sent. Rosters of state association officers and committees and of component county societies and affiliated organizations, are printed in the directories noted under Miscellany, on the front cover index.

CALIFORNIA MEDICAL ASSOCIATION

JOSEPH M. KING.....President
GEORGE G. REINLE.....President-Elect
EMMA W. POPE.....Secretary-Treasurer

OFFICIAL NOTICES

Hotel Rates at Annual Session*

HOTEL DEL MONTE, CONVENTION HEADQUARTERS

Rates for Annual Session, April 24-27, 1933

Only American Plan rates are quoted by the Hotel Del Monte. The rates published in the March issue of CALIFORNIA AND WESTERN MEDICINE have been revised and the following have since been quoted:

Main Building and Cottages:

Single room with bath (one person), $9 per day.

Double room with bath (two persons), $8 each person per day.

Sitting room, $6.

Both Wings:

Single room without bath (one person), $7 per day.

Double room without bath (two persons), $6.50 each person per day.

Single room with bath (one person), $8 per day.

Double room with bath (two persons), $7 each person per day.

Two single rooms with bath between (two persons), $7.50 each person per day.

Two double rooms with bath between (four persons), $6.50 each person per day.

* * *

Next Council Meeting.—The date of the next meeting of the Council has been set for Sunday, April 23, at 8 p. m., in Room 723 at Hotel Del Monte.

COUNCIL MINUTES

Minutes of the Two Hundred and Twelfth Meeting of the Council of the California Medical Association at San Francisco January 21, 1933

The following minutes were approved by the Council at its two hundred and thirteenth meeting, held at San Francisco, on March 4, 1933.

Held in the office of the Association, Room 2004, 450 Sutter Building, San Francisco, Saturday, January 21, 1933, at 9:30 a. m.

Present.—Doctors Joseph M. King, president; George G. Reinle, president-elect; O. D. Hamlin, chairman of the Council; Edward M. Pallette, speaker; Councilors W. W. Roblee, William Duffield, H. J. Ullmann, F. R. DeLappe, A. L. Phillips, K. L. Schaupp, H. S. Rogers, R. A. Peers, G. G. Hunter, H. E. Zaiser, W. H. Kiger, M. R. Gibbons, T. H. Kelly; George H. Kress, editor; Emma W. Pope, secretary; Charles A. Dukes, chairman of the Committee on Public Relations; Walter M. Dickie, director of the Department of Public Relations, and Hartley F. Peart, general counsel. (Doctors J. H. Shephard, Joseph Catton and Rodney Yoell were present by invitation during discussion of certain subjects.)

Absent.—Dr. J. B. Harris, councilor.

1. **Call to Order.**—The meeting was called to order by the chairman, O. D. Hamlin. Doctor Hamlin stated that requests to appear before the Council had been received from Doctor Shephard to discuss the medical service plan, Doctor Yoell to discuss a proposed hospital association bill, and Doctor Catton to discuss the proposed changes in the commitment laws.

Action by the Council.—On motion of King, seconded by Kiger, and unanimously carried, the following resolution was adopted:

Resolved, That the time granted to each speaker be limited to fifteen minutes.

2. **Budget for 1934-1935.**—Doctor Kelly, chairman of the Auditing Committee, submitted the budget for the year 1934-1935 as prepared by the Auditing Committee and approved by the Executive Committee.

Action by the Council.—After discussion, on motion of Pallette, seconded by Reinle, and unanimously carried, the following resolution was adopted:

Resolved, That the budget for the year 1934-1935 as submitted by the Executive Committee, be approved.

3. **Financial Statement.**—Financial statement for the month of November, 1932, was presented by the secretary and approved as follows:

NOVEMBER, 1932

Total receipts for November		$ 3,698.03
Total expenses for November		5,098.90
*Loss for November		$ 1,400.87
Gain for ten months		348.04
Total loss for 1932		$ 1,052.83
Cash on hand, January 31, 1932	$32,791.28	
Cash on hand, Revolving Fund	1,000.00	
Cash on hand, petty cash	50.00	
Cash on hand, Salary Fund	1,300.00	$35,141.28
Total cash on hand, November 30, 1932		$34,088.45

4. **Balance Sheet for December, 1932.**—The chairman of the Auditing Committee submitted the balance sheet for December, 1932, giving the assets and liabilities of the California Medical Association. Full discussion was had of the items included in the statement.

Action by the Council.—On motion of Schaupp, seconded by Peers, and unanimously carried, the following resolution was adopted:

Resolved, That the balance sheet for December, 1932, be approved as submitted.

5. **Recess of Council.**—On motion of King, seconded by Reinle, and unanimously carried, the following resolution was adopted:

Resolved, That a recess of the Council be called to permit a meeting of the "Trustees Of The California Medical Association."

6. **Call to Order.**—At the expiration of the recess, the meeting was called to order by the chairman.

7. **Fiscal Year.**—Discussion was had of a change in the fiscal year of the California Medical Association as recommended in Minute No. 3 of the one hundred and thirty-fifth meeting of the Executive Committee. The secretary stated that the auditor had advised that it would be impossible to set the fiscal year as July 1 to June 30 on account of the impossibility of having

* Editor's Note.—For additional information concerning other hotels and rates, see page 286.

* The apparent increase of expenses over receipts from April to December is occasioned by the fact that the major portion of dues is received during the first three months of the year.

an audit for submission to the House of Delegates in the event the fiscal year was so set. The secretary stated that such date could be set as the "budget year."

It was the sense of the Council that the present fiscal year be retained.

8. **Minutes of the Executive Committee.**—The minutes of the one hundred and thirty-fifth meeting of the Executive Committee as mailed to all councilors were presented for approval.

Action by the Council.—On motion of Kiger, seconded by Pallette, and unanimously carried, the following resolution was adopted:

Resolved, That the minutes of the one hundred and thirty-fifth meeting of the Executive Committee be approved, except the action recommended under item No. 3 referring to the fiscal year of the Association.

9. **Retired Membership.**—(*a*) A request was presented from the San Francisco County Medical Society asking that Campbell Ford be granted retired membership in the California Medical Association.

Action by the Council.—On motion of Schaupp, seconded by Phillips, and unanimously carried, the following resolution was adopted:

Resolved, That Campbell Ford, M. D., member of the San Francisco County Medical Society, be granted retired membership in the California Medical Association.

(*b*) A request was presented from the Santa Clara County Medical Society asking that Hannah Goodridge be granted retired membership in the California Medical Association.

Action by the Council.—On motion of Ullmann, seconded by Kelly, and unanimously carried, the following resolution was adopted:

Resolved, That Hannah Goodridge, San Jose, member of the Santa Clara County Medical Society, be granted retired membership in the California Medical Association.

(*c*) A request was presented from the Sonoma County Medical Society asking that Loftus H. Francis, Cotati, be granted retired membership in the California Medical Association.

Action by the Council.—On motion of Kelly, seconded by Rogers, and unanimously carried, the following resolution was adopted:

Resolved, That Loftus H. Francis, Cotati, a member of the Sonoma County Medical Society, be granted retired membership in the California Medical Association.

10. **Personnel of Committee on Physical Therapy.**—The following names were submitted by Doctor King for membership on the Committee on Physical Therapy: Doctors J. S. Hibben, Howard Naffziger, H. L. Langnecker, Rodney Atsatt, Charles L. Lowman and B. O. Raulston.

It was the sense of the Council that the membership of the committee as reported by Doctor King be approved.

The secretary was instructed to notify Doctor Hibben and the committeemen of the appointments.

11. **Nominating Committee for Appointments on Standing Committees.**—Discussion was had of the necessity for careful selection of appointees on standing committees by the Council for approval by the House of Delegates. Doctor King suggested that a nominating committee of three, preferably one from the north, one from the south and one at large, should be appointed to submit to the Council carefully chosen names of members peculiarly fitted to the vacancy to be filled.

Action by the Council.—On motion of Schaupp, seconded by Ullmann, and unanimously carried, the following resolution was adopted:

Resolved, That the chairman of the Council be authorized to appoint a nominating committee to suggest to the Council names of members for appointment on the standing committees.

It was agreed that the committee should consist of three members of the Council; one from the north, one from the south, and one at large.

12. **County Society Charter.**—Doctor King stated that on his recent trip through the northern part of the state, he had visited all doctors in Del Norte County and had suggested that a county society be charted in Del Norte County. Doctor King then presented correspondence from J. L. Stump and a letter signed by all licensed M. D.'s in Del Norte County requesting that a charter be granted.

Action by the Council.—On motion of Rogers, seconded by Ullmann, and unanimously carried, the following resolution was adopted:

Resolved, That the Council recommend to the House of Delegates that a charter be granted to the Del Norte County Medical Society.

13. **Corporate Practice.**—Full discussion was had of corporate practice in California, and the possibility of action under authority of the Blake decision. The general counsel stated that lists of corporations whose activities in this respect had occasioned inquiry had been secured, and the matter had been taken up with the Board of Medical Examiners but that on account of certain unforeseen contingencies no action had been taken up to the present time.

It was suggested that Mr. Peart prepare a report on the corporate practice of medicine for submission to the House of Delegates with suggestions regarding the advisability and expense incident to securing enforcement of the law as announced in the Blake decision.

Action by the Council.—On motion of Duffield, seconded by Gibbons, and unanimously carried, the following resolution was adopted:

Resolved, That in accordance with the suggestions made, Mr. Peart prepare a report on this matter for presentation at the first meeting of the House of Delegates.

The inadvisability of action at the present time was pointed out, and on motion of Reinle, seconded by DeLappe, the following resolution was adopted:

Resolved, That consideration before the annual session be taken in executive session.

Action by the Council.—On motion of King, seconded by Kelly, and unanimously carried, the following resolution was adopted:

Resolved, That the secretary send Norman Sterry, Esq., of Los Angeles a letter of thanks for the Council for his interest in the matter of corporate practice.

14. **Commitment Laws.**—Discussion was had of the proposed changes in the commitment laws. Doctor Hunter stated that the proposed bill had been prepared by interested parties in the south; that expressions of opinion had been received from the Southern California Psychopathic Association as well as lawyers, social workers and interested laymen and that the proposed bill was based upon humanitarian practices.

Doctor Catton agreed that some revision of the bill was necessary and Doctor Hunter stated that there would be no objection to such revision.

Action by the Council.—On motion of King, seconded by Reinle, and unanimously carried, the following resolution was adopted:

Resolved, That the Council endorse, in principle, the proposed laws governing the commitment of the mentally sick as outlined by Doctors Catton and Hunter.

15. **Health Association Bill.**—Doctor Catton, member of the Legislative Committee, stated that Dr. Rodney Yoell, who was working on a proposed bill governing hospital associations with Doctors P. K. Brown and Ralph Reynolds, had expressed the desire to appear before some authoritative body of the State Association and present his ideas; and that Doctor Harris, chairman of the Legislative Committee, had secured permission from the chairman of the Council to invite him to present a proposed bill which Doctor Yoell had drafted before this meeting of the Council.

Doctor Yoell then stated that it was the intention of the committee which had prepared the proposed bill to present it for the consideration of organized medicine and to secure its reaction. The proposed bill was then read by Doctor Yoell and discussed briefly, and certain changes were recommended. Doctor Yoell was asked if the Council should endorse only part of the bill would he accept the recommendations of the Legislative Committee of the Association. Doctor Yoell replied that if a better bill were presented to the Legislature covering the elements set forth, he would be willing to withdraw his bill, but that if no other bill were presented he would go ahead with his bill. It was suggested that the bill be introduced at the first session of the Legislature by title only and that the details of the bill be worked out before the adjournment of the Legislature.

Doctor King requested that copies of the bill as submitted be sent to all members of the Council for study and that when the bill is introduced, a copy as introduced be sent to him at his expense. Doctor Yoell stated that he would introduce the bill by title within the next week, if that were possible; that on this point of procedure it would be necessary for him to consult his friends in the California Legislature.

Action by the Council.—On motion of King, seconded by Kress, and unanimously carried, the following resolution was adopted:

Resolved, That Doctor Yoell be thanked for bringing this matter before the Council.

16. **Clinic Bill.**—Mr. Peart read a proposed bill governing the licensing and control of clinics, which he stated he had prepared at the direction of the Committee on Public Relations, and which would be introduced in the Legislature at the committee's suggestion. He asked that the Council carefully study the bill when copies thereof were available.

17. **Noon Adjournment.**—At this point, adjournment was taken for luncheon.

18. **Call to Order.**—The afternoon session of the Council was called to order by the chairman.

19. **Medical Service Plan of Santa Clara County Society.**—Dr. John Hunt Shephard, chairman of the committee appointed by the Santa Clara County Society to confer with the Council of the California Medical Association, presented a report on a medical service plan proposed in Santa Clara County.

Full discussion was had by members of the Council. It was pointed out that several other counties in the state were working on medical service plans and that requests for similar funds would probably be received from other counties if such precedent were established.

The Council felt that it could not establish the precedent of underwriting any one medical service plan at this time but that any plan undertaken would have the assistance of the Public Relations Committee.

20. **Hospital Association Legislation.**—The general counsel stated that a hospital association bill had been introduced by Senator Seawell in the Legislature (senate bill 160). It was felt that the only persons qualified to furnish medical service were licensed practitioners.

It was stated that the attitude of the Council had already been expressed at Sacramento and was "that only bills regulating organizations or individuals selling hospitalization could be approved and that no bill providing for the furnishing of medical service by corporations or laymen or by any one other than licensed practitioners should be enacted.

Action by the Council.—On motion of Gibbons, seconded by Duffield, and unanimously carried, the following resolution was adopted:

Resolved, That all bills authorizing any hospital association, incorporated or unincorporated, to furnish medical or surgical service be opposed and that decision as to any necessary action be left to the discretion of the Executive Committee.

21. **Council Meeting.**—Further discussion was then had of proposed legislation and it was felt that a special meeting of the Council should be held.

Action by the Council.—On motion of Schaupp, seconded by Peers, and unanimously carried, the following resolution was adopted:

Resolved, That a special meeting of the Council be held at such time as proposed legislative bills are in form for intelligent consideration; and that the chairman of the Council be authorized to set the exact date.

22. **County Hospital Legislation.**—Discussion was had of the feasibility of the enactment of a county government act which would provide for a county institutions commission for each county, similar to that now established in Alameda County, to act in an advisory capacity to the Board of Supervisors.

Action by the Council.—On motion of Duffield, seconded by Kiger, and unanimously carried, the following resolution was adopted:

Resolved, That the general counsel be asked to prepare such bill providing for County Institution Commissions.

23. **Narcotic Legislation.**—Doctor Duffield reported on the economies proposed in the enforcement of narcotic control in California. Doctor Duffield stated that proposals had been made to abandon the Narcotic Hospital at Spadra and to dissolve the Narcotic Enforcement Division.

Action by the Council.—On motion of Duffield, seconded by Gibbons, and unanimously carried, the following resolution was adopted:

WHEREAS, California has won distinction among our states as the creator of a model code of laws protecting our people from drug addiction and the illicit narcotic traffic; and

WHEREAS, Inimical bills have been introduced in our Legislature threatening the abolishment of our State Narcotic Division for the enforcement of these laws, and threatening the extinction of our State Narcotic Hospital at Spadra for the treatment and rehabilitation of drug addicts; and

WHEREAS, We fully recognize the necessity of great economy in state government, but we are convinced that great economy can be brought about in the conduct of our State Narcotic Division without sacrificing efficiency, and we know that the cost of maintenance of the State Narcotic Hospital can also be substantially reduced inasmuch as the superintendent believes that about one hundred thousand dollars will be sufficient for the biennium; and

WHEREAS, The abolition of our State Narcotic Law Enforcement and rehabilitation work will result in a greater spread of drug addiction among our people and will cost the taxpayers a much greater sum of money directly through the increase of crime and indirectly through the added burden thrown upon our courts, jails and hospitals; therefore, be it

Resolved, That the Council of the California Medical Association go on record in opposition to this proposed legislation, which is certainly opposed to an enlightened, wise, and humanitarian solution of this very serious problem, and we most respectfully urge our governor and our Legislature to protect the great advances made in recent years in our battle against the curse of drug addiction; and be it further

Resolved, That copies of these resolutions be sent to the governor and to the members of the Legislature and the several county medical associations of this organization.

24. **Advisory Committee to the Department of Institutions.**—Dr. Joseph Catton, chairman of the Advisory Committee to the Department of Institutions, which committee was appointed by the president during 1931 to advise the director of the Department of Institutions, reported on the activities and the recommendations made by the committee.

Action by the Council.—On motion of Peers, seconded by Kress, and unanimously carried, the following resolution was adopted:

Resolved, That the report of the committee be accepted and the committee be thanked for its services and be discharged; and if appointment of another committee is desired by the director and he communicates with the secretary of the California Medical Association, the Council will arrange a meeting with him at which time the duties of such committee will be set down more specifically.

The secretary was instructed to notify Doctor Toner of the action of the Council.

25.* (See footnote.)

26.* (See footnote.)

27. **Letter of San Francisco County Society re Medical Service Principles.**—A letter from the Board of Directors of the San Francisco County Medical Society requesting information on the principles adopted by the Council as a basis for any plan of medical service, was read as follows:

"The Council of the California Medical Association,

"450 Sutter Street, San Francisco.

"A letter dated October 27, 1932, signed by the director of the Department of Public Relations forwarded to the secretary of this society has been received, setting forth certain principles adopted by the Council of the California Medical Association for the guidance of county medical societies which may desire to formulate a plan of medical service on an insurance basis. This letter has been presented to the Board of Directors of the San Francisco County Medical Society.

"Are we correct in assuming that this letter deals with the same matter which has since become popularly known as the 'Graves Plan'? If so, we have had the matter called to our attention in the columns of the daily press and also in the *Literary Digest* where the source is credited to a news release by Dr. G. P. Porter, director of the California State Department of Public Health.

"It was our understanding that the set of principles was to be presented to the county medical societies for their consideration and that the formulation of a plan based upon these principles was to be optional with each county society.

"Was it the intention of the Council to have further discussion and popularization of such a plan conducted in the lay press and before lay gatherings, or did it intend the plans to be studied quietly by the component county societies, some of whom might decide to pioneer organizations similar to those envisaged in the plan?

"If the Council intended lay publicity, did it contemplate this publicity as conducted by the California State Department of Public Health?

"Are the details of these plans, especially the rates to be charged for family and minor children's services so easily determined as the proponent of the plan is quoted as saying in the *Literary Digest?*

"If so, can the San Francisco County Medical Society have some help as it finds the question without answer so far?

"Finally, will the Council make a public statement of its purposes in regard to this so-called plan, so that the confusion existing in the minds of the members of this society (and others), that has been engendered by the numerous statements appearing in the lay press, since any announcement by the Council, may be cleared and the medical profession and the public of California may know in simple terms just what the California Medical Association intends?

"Very truly yours,

"The Board of Directors of the San Francisco County Medical Society,

"By (Signed) MARY JONES-MENTZER, M. D.,
Secretary."

Discussion was had of the publicity given the principles in the lay press and by the Department of Public Health.

It was the sense of the Council that no clear statement had been made by the Association as to the intent of the Council in adopting the principles and that the California Medical Association should send out a letter by its Council to all county societies telling exactly what is meant by the principles and the purposes of the Council in regard to the principles and tentative forms of organization which it has had prepared.

Action by the Council.—On motion of Ullmann, seconded by Reinle, and unanimously carried, the following resolution was adopted:

Resolved, That the Council notify the component county medical societies that it has approved a set of principles and four forms of service to meet various local situations; and that such component county societies as may wish to adopt one or more of the above types may write for copies of such principles and types of service, modify them to suit local conditions, and return the modified forms for approval by the Committee on Public Relations and endorsement by the Council of the California Medical Association. The component county society is then ready to act, if by two-thirds vote of its members it decides to do so; and be it further

Resolved, That a letter be sent to the San Francisco County Medical Society stating that the Council has so far adopted only the principles and types of service that may be used by component county societies; and be it further

Resolved, That a letter be written to the director of the State Department of Health, Giles Porter, explaining the position in which publicity through the *Bulletin* of the State Department of Public Health has placed the California Medical Association and requesting that no further publicity be given in the weekly *Bulletin.*

28. **Membership Roster.**—George H. Kress, editor, submitted five different forms and relative costs for the membership roster to be published in the March issue of CALIFORNIA AND WESTERN MEDICINE.

Action by the Council.—On motion of Kress, seconded by Schaupp, and unanimously carried, the following resolution was adopted:

RESOLVED, That the roster in the form which consists of the surname, initials, city and key number for the county society be published in the March issue of CALIFORNIA AND WESTERN MEDICINE and that the cost of such roster be carried as a charge of the California Medical Association.

29. **Article by William Woodward.**—The editor stated that Doctor Pinkham had forwarded an article by Doctor Woodward, Bureau of Legal Medicine and Legislation of the American Association on "California Chiropractic as a Lawyer Sees It."

It was the sense of the Council that there was no objection to the publication of the article, but that proofs should be sent to Doctors Kelly, King, Reinle and Mr. Peart.

30. **Annual Session Cuts.**—Discussion was had of the publication of photographs of invited guests, section secretaries, etc., in the program number of CALIFORNIA AND WESTERN MEDICINE. It was pointed out that the inclusion of such photographs added materially to the makeup of the program number.

Action of the Council.—On motion of Kress, seconded by Kelly, and unanimously carried, the following resolution was adopted:

Resolved, That the same custom be followed as in the past.

31. **Reports of Officers and Standing Committees.**—It was the sense of the Council that the same custom be followed in regard to the *Pre-Convention Bulletin* as in the past, the expense of its publication in CALIFORNIA AND WESTERN MEDICINE to be charged as a separate item from CALIFORNIA AND WESTERN MEDICINE.

* Note.—Minutes 25 and 26 refer to matters still under consideration by the Council. Publication will be made in due time by Council secretary.

32. **California and Western Medicine.**—Doctor Kress reported on certain economies that had been effected in publication of the JOURNAL, namely a reduction of printing costs of approximately $100 per month, which included monthly reductions of $50 on stitching, $30 on inserts and approximately $20 on wrapping and mailing costs.

33. **Conference on Medical Economics.**—Doctor Dickie, director of the Department of Public Relations, stated that a letter had been received from the secretary of the Oregon State Medical Society suggesting that it might be advantageous for the California, Washington and Oregon societies to hold a conference on medical economics; that the letter had been considered by the Executive Committee and the Committee on Public Relations and referred to the Council without recommendation.

Action by the Council.—On motion of Ullmann, seconded by King, and unanimously carried, the following resolution was adopted:

Resolved, That the letter from the Oregon State Medical Society be tabled.

34. **X-Ray Fee Schedule.**—Doctor Gibbons stated that new complications had arisen and that the matter of x-ray fee schedules could properly lie over until the March Council meeting. So ordered.

35. **Activities of Health Officers.**—Doctor Dickie presented correspondence received from the director of the State Department of Health, the Orange County health officer and the health officers of San Luis Obispo and San Joaquin counties relating to the activities of health officers in carrying on immunization campaigns.

The Council felt that the proper division of medical care is that prophylaxis is the function of the health department, and treatment, the function of the physician.

Action by the Council.—On motion duly made, seconded and carried, the following resolution was adopted:

Resolved, That the House of Delegates consider the matter of activities of health officers.

36. **Cancer Commission.**—The secretary read a letter from the Cancer Commission which stated that inquiries had been received as to the value of the Coffey-Humber treatment for malignancy and asking for instruction from the Council regarding the handling of such inquiries, and further suggesting that the Council direct an inquiry into all pertinent facts covering organization and conduct of all such clinics.

Action by the Council.—On motion of Duffield, seconded by Gibbons, and unanimously carried, the following resolution was adopted:

Resolved, That any inquiries received be referred to reprints published by the White Memorial Hospital and that the Cancer Commission be advised that the Council is not empowered to investigate clinics.

37. **Meeting of Hospital Executives.**—Doctor Dickie reported on the meeting of the Hospital Executives to be held at Long Beach, February 22, 23 and 24. Doctor Dickie stated that the Committee on Public Relations considered it advisable that representatives of the California Medical Association be present at the meeting since hospital insurance was to be considered.

38. **Alameda County Medical Service Plan.**—Doctor Dickie stated that Mr. Peart had asked that the Council assist the Council of the Alameda County Society in formulating certain papers necessary for a hospital insurance plan the society is working on. No objection.

Doctor Dickie stated that the Committee on Public Relations had authorized the publication in the Department *Bulletin* of the principles adopted by the Council for medical service and hospitalization and the medical service and hospital plan of the Alameda County Society. No objection.

39. **Woman's Auxiliary.**—The secretary presented a request from Mrs. Percy, president of the National Woman's Auxiliary, for a gift of $250 from the California Medical Association to carry on the National Auxiliary program. Doctors Reinle and Duffield spoke of the excellent work carried on by the Auxiliaries in Alameda and Los Angeles counties.

Action by the Council.—On motion of Reinle, seconded by Duffield, and unanimously carried, the following resolution was adopted:

Resolved, That a gift of $250 be granted to the president of the National Woman's Auxiliary in consideration of the fine work done by certain local Auxiliaries.

40. **Clinical Prize Rules.**—The secretary stated that the question had been raised of eligibility of a paper for the Clinical and Research Prize Contest, which paper was prepared by a member of the California Medical Association in collaboration with a medical student. It was the sense of the Council that Rule No. 1 governing submission of papers, which provided that "Any member of the California Medical Association is eligible to compete for the prizes" covered the question and that the paper was ineligible for submission in the contest.

41. **Kern County Society.**—The secretary presented a resolution passed in regular meeting of the Kern County Medical Society.

It was pointed out that the petition was signed by but twenty members of the society and by one prospective member and by one proxy.

It was the sense of the Council that no action be taken until after receipt of the additional signatures promised in the accompanying letter from Kern County.

42. **Election of Trustee for Indemnity Defense Fund.**—The secretary stated that the term of office of Junius B. Harris, trustee of the Indemnity Defense Fund, had expired.

On nomination of Phillips, seconded by Ullmann, Dr. Junius B. Harris was elected trustee for the Indemnity Defense Fund for a period of three years; term expiring 1936.

43. **Adjournment.**—There being no further business, the meeting adjourned.

O. D. HAMLIN, *Chairman.*
EMMA W. POPE, *Secretary.*

EXECUTIVE COMMITTEE*

Digest of the Minutes of the One Hundred and Thirty-fifth Meeting, Held at San Francisco, December 3, 1932

1. Roll call.

2. Financial statements for September and October, 1932, were presented and approved.

3. Recommendation to Council for change in fiscal year of Association.

4. Proposed budget for 1934-1935 presented by chairman of Auditing Committee. Budget revised for presentation to Council at January meeting.

5. Annual session: (a) Report by secretary on invited speakers; (b) report on meeting rooms at Del Monte and resolution adopted that all arrangements for meeting rooms be made through offices of Association; (c) program for second general meeting placed in charge of Public Relations Department; (d) it was the sense of the Executive Committee that the charge for exhibit space at the annual session be on the same basis as last year.

6. Correspondence of member re industrial accident fee schedule referred to director of the Department of Public Relations with request that he contact Industrial Commission and submit conjoint report to Council.

7. Chairman of Executive Committee authorized to answer letter requesting information on activities of the Moore-White Clinic and the Columbia Casualty Company.

* For the information of members, digests or summaries of the minutes of the Executive Committee meetings are compiled for publication in CALIFORNIA AND WESTERN MEDICINE.

8. Question of ethics involved in consultation with licensed practitioners other than doctors of medicine raised by member. Left to individual decision.

9. Letter from member presented. Case outlined in letter deemed not within the jurisdiction of the State Association.

10. Resolution adopted by county society of Georgia advocating limitation of graduates from medical schools presented by editor. No action taken.

11. Letter from member of the Orange County Society regarding activities of local health officers presented. Referred to Department of Public Relations.

12. Letter of invitation from secretary of the Oregon State Medical Society to the California Medical Association to participate in conjoint Conference on Medical Economics referred to Council.

13. Letter prepared by Counsel for information of members of medical society authorized sent to members of California Medical Association.

14. Report on clinic at San Diego. Secretary authorized to send information on file to Doctor Pinkham and request action.

15. Auditing Committee authorized payment of expenses and disbursements incurred by general counsel.

16. Authorization of *Bulletin* to be published by Committee of Public Relations; cost of same to be included in budget of department.

17. Transportation costs of Committee on Public Relations to be included under budget of Department of Public Relations.

18. Request by chairman that Executive Committee make a restatement of purposes of California Medical Association and the medical service plan approved by the Council at the September meeting in order to counteract confusion and misrepresentation existing among public and members of the profession. No action taken.

19. Report by chairman of Legislative Committee on proposed legislation inimical to interests of medical profession. Veterans' legislation and proposed clinic bill considered.

20. Secretary instructed to write county health officer of Imperial County that protest against milk inspection being taken from health officers and placed under the Department of Agriculture would be given publicity in JOURNAL.

21. Adjournment.

T. HENSHAW KELLY, *Chairman.*
EMMA W. POPE, *Secretary.*

Digest of the Minutes of the One Hundred and Thirty-sixth Meeting of the Executive Committee, Held at San Francisco, February 4, 1933

1. Call to order.

2. Presentation of letter from Doctor Harris, chairman of the Legislative Committee, regarding bills of interest to public health and scientific medicine.

Resignation of Joseph Catton, member of the Legislative Committee presented. Recommendation of Executive Committee to Council that Doctor T. Henshaw Kelly be appointed to fill the unexpired term.

Doctor Harris authorized to employ secretarial help during session of legislature. Reasonable cost to be defrayed by Association.

3. Suggested that chairman of Council set February 18 as next meeting of Council.

4. Decision regarding certain legal expense left to next Council meeting.

5. Secretary reported county society dues of eight members covered by check on closed bank of Colusa dishonored. Sense of committee members be carried in good standing for reasonable length of time.

6. General counsel called attention of Executive Committee to a decision of District Court of Appeals in which x-rays were deemed to be like photographs and could be interpreted by anyone. Legal counsel instructed to prepare and file an amicus curiae brief. Expenditure of $200 authorized to cover such brief.

7. Adjournment.

T. HENSHAW KELLY, *Chairman.*
EMMA W. POPE, *Secretary.*

COMPONENT COUNTY MEDICAL SOCIETIES

ORANGE COUNTY

On February 28 a special meeting was held in the Chapel of the Orange County Hospital for the purpose of hearing the state president, Joseph M. King, He gave us a very instructive hour on legislation now pending. Some of the supervisors were also present.

* * *

The regular meeting was held at the same place on March 7. Doctor Sellon, as chairman, had arranged a very interesting and highly instructive program. Doctor Newkirk briefly presented a case of strabismus corrected by surgery and eye exercises. Dr. Theron Johnson presented a case of traumatic trachoma, and both he and Doctor Beasley gave papers on this difficult subject. Doctor Curry presented a case of malignancy of the antrum treated by surgery and radiation. This was ably discussed by Doctors Earel and Chase. Doctors Newkirk, Price, and Abbott gave neurologic cases, with ventriculograms.

Mrs. King of the Orange County Nursing Association outlined the schedule for hourly nursing service.

Doctor Domann was appointed to serve on the Legislation Committee.

The second reading of six new applications was heard, and Doctors Bruning, Earel, Gillispie, Huenegardt, Nies, and Weston were elected to membership.

A committee of Doctors Baker and Olson were appointed to serve in connection with the State Physiotherapy Committee, of which Doctor Hibbens is chairman.

Doctor Olson presented display cards he uses in his office urging parents to have their children immunized.

Doctor Hollingsworth spoke very enlighteningly on the Orange County Coöperative Exchange, which charges one dollar for membership and ten per cent of each exchange.

The Association went on record as being strongly opposed to any coöperative movement such as this in which the promoters received any percentage for the privilege of using an M. D.'s services for barter.

After further discussion on this interesting phase of medical economics the meeting adjourned.

WALDO S. WEHRLY, *Secretary.*

PLACER COUNTY

The Placer County Medical Society held its March meeting at the Placer County Charity Hospital, Auburn, on Saturday evening, March 11. The meeting was called to order by the president, Dr. L. B. Barnes.

There were present the following members and visitors: Members—Doctors L. B. Barnes, Atkinson, Crossen, Kindopp, Russell, Miller, Mackay, Peers, Louis E. Jones, Radford, Dunievitz, C. C. Briner, Monica Stoy Briner, and Thoren. Visitors—Doctors Leonard B. Barnard and Robert Stewart Peers of Oakland, Ward of Auburn, Pulford of Sacramento, Henry Gibbons of Lane Hospital, San Francisco; Doctors Vinks and Lincoln, and Miss Anna M. Brubaker of Highland Hospital, Oakland.

The application for membership of Dr. Watslo Anthony Vinks of Lincoln was read. The application of Doctor Vinks will come up for approval at the next meeting.

Resolutions on the death of Dr. George Howard Fay were read and adopted.

A letter from Dr. S. S. Kalman asking for transfer card to Alameda County Medical Society was read, and the secretary reported that Doctor Kalman's request had been complied with.

A letter from Dr. R. O. Schofield, secretary of the Northern District, California Medical Association, extending an invitation to members to attend the Northern District meeting at Chico on Wednesday, April 12, was read.

A letter from Doctor Pope calling attention to the great value of the minute-book containing the minutes of the society, following its organization in 1889, and

offering the use of the fireproof files in the Association's historical file, for the better protection of these minutes, was read. Doctor Pope's offer was accepted.

Correspondence from the state office as well as letters from the California Cancer Commission and the Committee on Physical Therapy, together with various resolutions in the secretary's files, were read.

Dr. L. B. Barnes reported a case of fracture of the femur and fracture of the tibia in a Chinese patient recently under his care.

There being no further business the president called upon Dr. Robert Stewart Peers of Oakland, who presented a paper on *The Arthritis Problem.* Doctor Peers gave a brief résumé of the arthritis problem, with special reference to the incidence, dissemination, pathology, and laboratory features of proliferative (atrophic) and degenerative (hypertrophic) arthritis. He drew a pessimistic picture of the prognosis if we are to continue to deal with such types as now present themselves for attention. A more optimistic outlook is warranted if diagnosis precedes deformities and patients can be made subject to as full control as is exacted in other diseases, notably tuberculosis. The doctor also gave a summary of therapeutic measures at our disposal, with emphasis on the limitations of such therapeutic measures.

Doctor Peers' paper was discussed by Doctors Pulford, Barnard, Gibbons, and Robert Stewart Peers.

The president introduced Dr. Leonard B. Barnard of Oakland, who gave an address on *The Newer Method in Some Common Fractures.*

Doctor Barnard selected four types of fractures and their treatment, illustrating his remarks by means of lantern slides. The types presented were: (1) The "Wallace" collar in fracture; (2) The manipulative reduction of "bumper fractures" of the knee; (3) The hyperextension method in compression fracture of the spine; and (4) The "Russell" fracture method in fracture of the femur.

Doctor Barnard's paper was discussed by Doctors Kindopp, Pulford, Mackay, and C. C. Briner.

ROBERT A. PEERS, *Secretary.*

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SACRAMENTO COUNTY

A regular meeting of the Sacramento Society for Medical Improvement was held at the Elks Hall on January 17, at 8:30 p. m. Seventy-two members were present.

The president, Dr. George Briggs, called the meeting to order.

Dr. Nathan G. Hale presented an interesting case of *Aplastic Kidney.* This infantile kidney had been a focus of infection, and its removal cured the patient. Doctor Hale outlined the following points of interest in this case: (1) It is a rare condition. (2) Pyelographic studies demonstrated a normal kidney pelvis present in this infantile kidney. (3) It caused extreme pain and recurrent attacks of fever over a period of years. (4) Blood culture was positive when the infection in this kidney would flare up into activity, and negative during the quiescent periods. (5) This aplastic kidney was a focus of infection for a generalized septicemia and caused an infection in the normal kidney.

The paper for the evening, *Experimental and Clinical Observations on the Use of Kaolin in Intestinal Infections,* was presented by Dr. Louis H. Braafladt. While in China Doctor Braafladt was head of the department of pathology and bacteriology at Shantung University and had an opportunity to study many types of intestinal infections. In his paper he outlined the history of kaolin. It was used first in porcelain ware in China hundreds of years ago. Kaolin is feldspar of granite. Its use in the treatment of cholera, typhoid, botulinus, and dysentery infections was discussed. The toxins produced by the bacteria of the above diseases are definitely neutralized by large doses of kaolin. The mortality of cholera has apparently diminished due to the use of kaolin. The paper was discussed by Doctors O. F. Johnson, Edward Babcock and F. B. Reardan.

Major Roger Hillsman of the United States Regular Army showed some interesting films, demonstrating the newer infiltration method of the treatment of leprosy.

Dr. George Briggs asked that $500 be spent to make a survey of the medical conditions in Sacramento County. In the discussion which followed, Doctor Reardan made a motion that the board of directors authorize the expenditure of not more than $500 for the purpose of making a medical survey of Sacramento County. The motion was discussed by Doctors Pitts, Schoff, Young, Lindsay, Howard Hall, Kelsey, and Christman. The above motion was seconded, and carried.

Dr. George Briggs appointed the following committees for 1933:

Public Relations Committee—Doctors Young (chairman), Edward Babcock, Christman, Frank MacDonald, and Drysdale.

Banquet Committee—Doctors Farrell (chairman), Schoff, and Foster.

Program Committee—Doctors Hopkins (chairman), Dozier, and Hilding Johnson.

FRANK WARNE LEE, *Secretary.*

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SAN BERNARDINO COUNTY

The meeting of the San Bernardino County Medical Society, held at the County Charity Hospital on Tuesday, March 7, was called to order by the president at 8:10 p. m.

Doctor Ullmann, state councilor for the third district, made a brief address on legislation. The secretary followed with a short explanation of the work of the Medical Advisory Board of our county hospital.

The applications of Doctors Engel, Ingham, and Canfield were voted on and accepted.

A communication from Doctor Godfrey regarding a County Health Department meeting to be held on Friday, March 31, was read.

The scientific program of the evening followed:

Dr. Walter Pritchard of San Bernardino spoke on *Excretion Urography.*

Some Facts and Aspects on Transureteral Prostatic Resection, illustrated by motion pictures, was presented by Dr. Ivan L. Finkelberg of San Bernardino.

Discussion was opened by Dr. E. J. Eytinge.

E. J. EYTINGE, *Secretary.*

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SAN JOAQUIN COUNTY

The stated meeting of the San Joaquin County Medical Society was held on Thursday, March 2, in the Medico-Dental clubrooms. The meeting was called to order at 8:15 p. m. by President Doughty.

The minutes of the special meeting of the board of directors were read and approved.

Doctor Doughty made a verbal report of the visit of the president and the secretary to the Board of County Commissioners, and the secretary read a copy of the letter submitted to them. Doctor Doughty also reported on the meeting of the San Jose County Medical Society at which a plan for hospital and medical insurance was considered.

The first paper of the evening was given by Dr. Ralph A. Reynolds of San Francisco on *Health Insurance.* Doctor Reynolds reviewed the report and findings of the Committee on the Costs of Medical Care. He spoke of the top-heavy bureaucrasies existing for the administration of state medicine in foreign countries and urged the necessity for such activities to be controlled in this country by nonprofit associations made up from our county medical societies. He urged that we prepare plans and put them into operation before vicious state bills are introduced and become law.

His paper was discussed by Doctors Doughty, Van Meter, Broaddus, Dewey Powell, Sippy, Sanderson, Sheldon, and Chapman.

In conclusion, Doctor Reynolds said that his study of the subject has convinced him that insurance for the hospital, x-ray, laboratory, and nursing expense should be provided first. The individual relation of patient and physician should be preserved as long as possible. Plans for medical care insurance can be developed gradually as experience shows the way.

Before speaking on his subject, Dr. A. R. Kilgore chose to discuss Doctor Reynolds' paper, and especially in the light of the development of study by the San Francisco County Medical Society. He said that the San Francisco society planned to start with large groups, such as lodges and employees of factories, etc., rather than with individuals. By this means they hoped to get persons of average health so that the incidence of care and treatment would be low. By this means the employer or administrative heads would attend to the collection of fees and thus cut down the overhead of the insurance group from 20 to 40 per cent. He stated that 75 to 80 per cent of the employed in San Francisco are receiving less than $100 per month. When necessary most of these persons are now going to the free clinics. Doctor Kilgore figures from data at hand that with mixed groups like employees the cost per month would be divided as 60 cents for hospital, 60 cents for sickness and surgery, and 30 cents for overhead. This means a very low fee for the physician, and should be limited to the class of $1,500 or less per year. For the higher paid groups the fee should be more, and the increase go to compensation of the physician.

Doctor Kilgore also spoke briefly of the work of the Cancer Commission and the results they had attained.

C. A. BROADDUS, *Secretary.*

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SANTA BARBARA COUNTY

The regular meeting of the Santa Barbara County Medical Society was held in the Bissell auditorium of the Cottage Hospital on Monday evening, March 13.

Doctor Markthaler introduced to the members Dr. Alexander Lambert of New York City, who gave a most comprehensive and instructive talk on the treatment of the pneumonia patient. This paper was discussed and questions asked by Doctors Spaulding, Evans, Smith, Shelton, Main, Roome, Lamb, and Ussher.

At the conclusion of the scientific program the society went into executive session.

A communication from the American College of Surgeons was read and ordered filed.

Doctor Freidell presented a resolution which had been adopted by the Board of Supervisors and the staff of the County Hospital. Doctor Markthaler reported that this resolution had been discussed with the Public Relations Committee, but no action was taken. There was further discussion by Doctors Bakewell, Brown, Johnson, Ullmann, and Berry. During the discussion it was brought out that this resolution was already known to the state councilors, and upon motion of Doctor Freidell, seconded and carried, it was referred to the Public Relations Committee.

Doctor Freidell gave a preliminary report of the committee appointed to investigate conditions at the Santa Maria Hospital. As further time was needed to complete the report for some future meeting, no action was taken.

WILLIAM H. EATON, *Secretary.*

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SONOMA COUNTY

The regular monthly meeting of the Sonoma County Medical Society was held at The Tavern, near Santa Rosa, at 7 p. m. on March 9. Doctor Mark L. Lewis, president of the society, presided. Fifteen members were present.

Dr. William B. Faulkner, Jr., of San Francisco addressed the society upon the subject of ***Postoperative Pneumonia.*** His able presentation of this subject was well received and highly appreciated.

Routine business was transacted and the meeting adjourned.

W. C. SHIPLEY, *Secretary.*

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TULARE COUNTY

The regular monthly meeting of the Tulare County Medical Society was held at Motley's Café on February 26, preceded by a dinner. The meeting was called to order at 7 p. m. Doctor Fowler acted as secretary in the absence of Doctor Weiss.

Three new members—Doctors Thomas Mooney of Springville, W. R. Bridgman of Hanford, and Palmer D. Miller of Dinuba—were elected to membership in the society by unanimous vote.

Correspondence included an invitation to members to attend conferences on microscopic pathology and x-ray malignancy at the coming convention of the California Medical Association at Del Monte in April.

Doctor Lipson, chairman of the Committee on Public Relations, reported that a meeting had been held with the Board of Supervisors of Tulare County and that the following subjects were discussed:

The Board of Supervisors tabled their proposal to admit pay patients to the Tulare County General Hospital.

The proposal of the Tulare County Medical Society to change the name of the Tulare County General Hospital to "The Tulare County Charity Hospital" was not favored.

The Board of Supervisors were desirous of reducing the amount spent annually by the county for postmortem examinations, and suggested that this might be accomplished by having autopsies performed by the county physician or by some other doctor on a contract basis, and that the board wished the advice of the medical society on how best to handle this matter.

The board was also anxious to reduce the cost of administering the county health office and requested advice from the medical society on how this might be accomplished. It was stated that the board proposed to receive bids from doctors who might desire the position of county health officer and appoint that doctor who would take care of all work connected with that department at the lowest rate.

The board also wished the aid of members of the society in handling semi-indigent patients applying for treatment as clinic or bed patients at the County Hospital.

These last three subjects were discussed at some length by various members of the society.

It was pointed out that the performing of an autopsy was valuable to the individual physician from an educational standpoint. The suggestion was made that a reduction in the fee might be considered, but it was pointed out that the fee for this service had been $50 in former years and that the present fee of $25 was low enough, considering that in addition to performing the autopsy the physician was required to present his findings before the coroner's jury or grand jury or both.

The motion was made and passed that it be the consensus of opinion of the society that the present fee be maintained, and that the matter be referred to the Committee on Public Relations with authority to act for the society at its next meeting with the Board of Supervisors.

Affairs of the health office were discussed in some detail, and in the end it was moved and passed that the choice of health officer and management of his duties be referred to the Public Relations Committee for discussion with the Board of Supervisors with authority to act for the society, it being the desire of the society that the selection of a health officer, if any change be made, be not determined on a basis of lowest bidder, but that the committee have a voice in his selection and assist the board in determining a fair salary and system of management.

Regarding the management of the semi-indigent patient who applied to the Welfare Board for treatment, it was decided that if the Welfare Board would refer such patient back to the doctor selected by the patient with a statement of his financial status that the members of the society would give such patient treatment for a fee appropriate to his financial status or such as might be specified by the Welfare Board, and that members of the society would abide by such details of the plan as might be arranged between the Committee on Public Relations and the Board of Supervisors.

It was also hoped that some such plan could be arranged with private hospitals of the county.

President Kohn introduced the speaker of the evening, Dr. C. W. Mack, psychiatrist of the Livermore

Sanitarium, who gave an interesting and highly instructive talk on *The Treatment of Functional Mental Diseases*. The discussion which followed gave evidence of a lively interest in this topic. A motion to extend Doctor Mack a rising vote of thanks was promptly accepted.

Members present were: Doctors Johnstone, Lipson, A. Miller, Furness, Hicks, Betts, Hill, Ginsburg, E. C. Bond, Guido, Zellar, A. Bond, Tourtillot, Parkinson, Watke, Brigham, N. Miller, Preston, McClure, Kohn, P. Miller, Mooney, Zumwalt, Fowler, Mitchell, C. W. Mack, Bridgman; and one guest, Mrs. Ed Miller.

DONALD C. FOWLER, *Secretary Pro Tem.*

CHANGES IN MEMBERSHIP

New Members (60)

Alameda County.—Charles Paul Higgins, Haig H. Mitchell, John Joseph Sullivan.

Fresno County.—K. W. Butler, William Henry Gilliatt, Walter Levin.

Imperial County.—Donald Barber Marchus.

Lassen-Plumas County.—William Baird Knight.

Los Angeles County—

Benton N. Colver
Charles Albert Fisher
W. H. Goeckerman
George O. Gordon
C. Ward Irish
George F. Juenemann
Allen M. Kilgore
J. Ralph Lacoe
Solomon Malis
Samuel M. Martins
James H. McGranahan
William T. McKay
Ralph Edward Merrill
Albert E. Nelson
Joseph Raymond Perry
Thair Cozzens Rich
Alfred Rowland Robbins
Helen H. Robinson
J. Francis Schefcik
Ralph Myron Tandowsky
Charles William Thompson
Harold F. Thompson
Royal Grover Tucker
Albert John Wineland
Wesley Milton Wright

Mendocino County.—Joseph John Kirwin, Olga Alice Miller, George S. Wrinkle.

Monterey County.—Lenard Milo Andrus, Curtis Byron Gorham.

Sacramento County.—George Meredith Uhl, Louis H. Braafladt.

San Bernardino County.—Chauncey Baird, Samuel Benjamin Pond.

San Diego County.—Alfred John Cantoni.

San Francisco County.—Howard Alexander Brown, Victor Michael Dillon, Sherman Leland.

San Luis Obispo.—Charles Robert Kennedy, Earl Beardsley King.

Santa Cruz County.—Walter L. Ellis, Newton C. MacLafferty, George P. Tolman.

Shasta County.—W. M. Wilson, O. J. Hansen, H. E. MacDonald.

Siskiyou County.—J. Roger Campbell.

Tulare County.—Thomas Sylvester Mooney, Wallace Benson Parkinson.

Ventura County.—Claude Garrison Drace, W. F. Mosher.

Yolo-Colusa-Glenn County.—Maude Hester Tillotson.

Transferred (3)

M. A. Broemser, from Fresno to Santa Clara County.

John J. Fitzgerald, from Tehama to Contra Costa County.

Charles H. Law, from San Luis Obispo to Shasta County.

Resigned (11)

Hilda M. Davis, from San Francisco County.
Salvatore Cieri, from Alameda County.
Lloyd B. Dickey, from San Francisco County.
Mary E. Glover, from San Francisco County.
Bernice M. Hazen, from San Francisco County.
Carlos Leiva, from San Francisco County.
Malvina E. Moore, from Alameda County.
William H. Ross, from San Diego County.
Richard R. Rupert, from Alameda County.
Lydia J. Shimkin, from San Francisco County.
George E. Sutton, from San Francisco County.

In Memoriam

Berry, Andrew Jackson. Died in Los Angeles, February 12, 1933, age 68 years. Graduate of University of Louisville School of Medicine, Kentucky, 1890, Barnes Medical College, St. Louis, 1897. Licensed in California, 1901. Doctor Berry was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

✣

Carey, George H. Died January 31, 1933, age 57 years. Graduate of Hahnemann Medical College and Hospital, Chicago, 1901. Licensed in California, 1914. Doctor Carey was a member of the Los Angeles County Medical Association, the California Medical Association, and the American Medical Association.

✣

Fay, Franklin Goble. Died February 14, 1933, age 68 years. Graduate of Bennett Medical College, Chicago, 1886. Licensed in California, 1886. Doctor Fay was a member of the Sacramento Society for Medical Improvement, the California Medical Association, and a Fellow of the American Medical Association.

✣

Fay, George Howard. Died in Auburn, February 24, 1933, age 69 years. Graduate of Cooper Medical College, San Francisco, 1902. Licensed in California, 1902. Doctor Fay was a member of the Placer County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✣

Irwin, William Hayes. Died in Oakland, March 13, 1933, age 57 years. Graduate of Cooper Medical College, San Francisco, 1904. Licensed in California, 1904. Doctor Irwin was a member of the Alameda County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

✣

Mehrtens, Henry George. Died in San Francisco, February 28, 1933, age 47 years. Graduate of Stanford University School of Medicine, San Francisco, 1913. Licensed in California, 1913. Doctor Mehrtens was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✣

Wislocki, Eugene John. Died in San Jose, January 9, 1933, age 72 years. Graduate of Imperial University of Cracow, Poland, 1887. Licensed in California, 1891. Doctor Wislocki was a member of the Santa Clara County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

OBITUARIES

Henry George Mehrtens

On the morning of February 28 Dr. Henry G. Mehrtens passed from among us. His going came as a shock to many of his friends and acquaintances who were unaware that the illness which had confined him to bed for two weeks was of a serious nature. On February 14 he was stricken with coronary occlusion from which he was making a satisfactory recovery when, a week later, he suffered a further and fatal occlusion.

Doctor Mehrtens was born in November, 1885, in San Francisco, where he spent his boyhood and received his education preparatory to entering the University of California, from which he was graduated

Henry George Mehrtens
1885-1933

with the degree of B. S. in 1911. His medical course was interrupted for two years by a lung infection from which he, fortunately, recovered. Upon resuming his medical studies he chose to throw in his fortunes with the first class which was graduated from the Stanford Medical School, formerly Cooper Medical College. His class was graduated in 1913, and Doctor Mehrten's subsequent history is bound up closely with that of his alma mater, for he retained connection with the Stanford Medical School and Lane Hospital as house officer, house physician, assistant in neurology, associate professor, and, at his death, professor of medicine (neuropsychiatry). His long and close association with the medical school and hospital made him the logical successor to the deanship when Dr. William Ophüls retired from that position recently.

Doctor Mehrtens became a member of the San Francisco County Medical Society on April 4, 1916, and has been active in the affairs of the society continuously since then. His field of scientific endeavor was neuropsychiatry, in which he did considerable original work, especially in the treatment of neurovascular syphilis. His affability upon all occasions and toward all those with whom he came in contact, as well as his encouragement of those working with him, or under his direction, will make him remembered by many with whom he generously shared his experience and medical knowledge. The profession has suffered a real loss in the passing of Doctor Mehrtens, who was just past his forty-seventh birthday at the time of his death and at the height of a productive and useful career.

✠

Francis Frederick Knorp
1872-1933

Recently the many friends, both lay and professional, of Dr. Francis Frederick Knorp were profoundly shocked upon hearing of his sudden passing from heart disease.

Doctor Knorp was born in Suisun, California, on January 16, 1872, and spent his early life in that city. Later he came with his family to San Francisco and was educated in the public schools.

He was graduated from Cooper Medical College in 1892 and during 1893 served as intern at the San Francisco Hospital. After a short interval of country practice and a trip around the world as a ship's surgeon, he began his practice here in San Francisco.

He was an earnest student and that quality, coupled with great natural ability, eventually brought him into prominence in the local medical profession. He has been continuously connected with the College of Physicians and Surgeons since February 3, 1897, first as assistant demonstrator of anatomy, then as professor of anatomy, and for the last twenty years as professor of surgery. He was chief of staff of Saint Joseph's Hospital for many years, and up to the time of his passing was a member of the staff of Saint Mary's Hospital.

Socially and fraternally he was a member of the Olympic Club and an honorary member of the Psi Omega and Alpha Kappa Kappa fraternities. Professionally he was a member of the San Francisco County Medical Society, the California Medical Association, and the American Medical Association.

✠

George Howard Fay
1864-1933

Dr. George Howard Fay of Auburn, California, was born in Cedar Rapids, Iowa, June 7, 1864. He was graduated from Cooper Medical College in 1902, since which time he practiced continuously in Placer County. With the exception of two years at Forest Hill his entire professional life was spent in Auburn. For a number of years, in conjunction with the late Robert Fleming Rooney, Doctor Fay was county physician.

Doctor Fay had been a member of the Placer County Medical Society since its reorganization February 17, 1903. He served as secretary of the society during the years 1907-1908.

THE WOMAN'S AUXILIARY TO THE CALIFORNIA MEDICAL ASSOCIATION*

Component County Auxiliaries

San Bernardino.—The auxiliary to San Bernardino County Medical Association met at the home of Mrs. Carlos G. Hilliard, 534 Terracina Drive, Redlands. The invited guests were: Dr. F. B. Moore, president of the San Bernardino County Medical Association; Mrs. James F. Percy, Mrs. F. E. Coulter, and Mrs. A. W. Walker, president of the Riverside County Auxiliary. Mrs. Coulter gave a very concise and interesting talk on national, state, and county auxiliary work. An intermission for a social hour was enjoyed, and an opportunity given those present to become better acquainted. After tea, business was resumed, with Mrs. F. E. Clough, president, presiding. The postponed election resulted in the following officers for the year: Mrs. C. G. Hilliard of Redlands, president; Mrs. C. D. Dock of Redlands, vice-president; Mrs. W. P. Cherry of Rialto, second vice-president; Mrs. F. E. Clough of San Bernardino, secretary-treasurer. Plans were made for an early meeting in March, and for the State Board meeting at Los Angeles on Friday, February 17.

* * *

Orange County.—The Woman's Auxiliary to the Orange County Medical Association will hold their April meeting on the fourth at the Ebell Club house in Santa Ana. This is to be a luncheon meeting honoring the state president, Mrs. F. E. Coulter. Other invited guests are the state officers and board members.

* * *

San Joaquin County.—The annual meeting of the Woman's Auxiliary to the San Joaquin County Medical Society was held on March 2 at the home of the president, Mrs. P. B. Gallegos. Elsie E. Shirpser, Social Service worker, Jewish Committee of Personal Service, was the guest of honor and speaker. The officers were reëlected for the coming year: President, Mrs. P. B. Gallegos; first vice-president, Mrs. G. E. Sanderson.

ELLA B. CONZELMANN, R. N.,
Secretary and Publicity Chairman.

* As county auxiliaries to the Woman's Auxiliary to the California Medical Association are formed, the names of their officers should be forwarded to Mrs. Clifford A. Wright, chairman of the Publicity and Publications Committee, 454 South Irving Boulevard, Los Angeles. Brief reports of county auxiliary meetings will be welcomed by Mrs. Wright, and must be sent to her before publication takes place in this column. For lists of state and county officers, see advertising page 6. The Council of the California Medical Association has instructed the editor to allocate one page in every issue for Woman's Auxiliary notes.

Santa Barbara.—The Woman's Auxiliary to the Santa Barbara County Medical Society met at the home of Mrs. Charles Sydney Stevens, 2325 Santa Barbara Street, at 8 p. m. on Monday, March 13. Fourteen members were present. Mrs. Rodney Atsatt, the president, presided. To consider the basis upon which to award prizes to the graduates of Saint Francis Training School and the Knopp College of Nursing, a committee of three, to be appointed by the president, was recommended. Mrs. Henderson moved that such committee be appointed. Mrs. Wilcox seconded the motion. Discussion over what would be the best time to award the cash prizes ensued, with opinions offered by Mrs. Friedell favoring the senior, and Mrs. Henderson stating reasons for which she preferred the junior year. Dr. Hugh Friedell spoke on the lawsuit concerning the General Hospital, from the legislative point of view. He interpreted the various bills in connection with it and explained the ultimate effect each would have on the present hospital administration. Mrs. Atsatt gave a short but illuminating report from the meeting of the State Board Auxiliary in Los Angeles in February. She brought back with her our constitution, with corrections, which has been ratified. The secretary, Mrs. Hunt, was instructed to write a letter to our state president, Mrs. Coulter, and the members of her Orange County Auxiliary expressing our sympathy in their recent disaster. The members spent the evening sewing upon Red Cross garments for which there is an immediate need in the earthquake area. Light refreshments were served by the hostess.

MRS. W. R. HUNT.

* * *

San Luis Obispo.—The Woman's Auxiliary to the San Luis Obispo County Medical Auxiliary met at dinner at the Hotel Andrews on February 27, with Mrs. Deon Crew presiding. A letter from Mrs. F. C. Coulter, state president, was read and its valuable contents noted and acted upon by the auxiliary. Mrs. Chester J. Teass, state treasurer, gave a report of the State Board meeting in Los Angeles, outlining in detail the duties of the publicity chairman. Arrangements are being made to contact the secretary of the San Luis Obispo County Society and get suggestions how the auxiliary may prove of service to the California State White House Conference on Child Welfare Protection. A prize is to be offered by the auxiliary in an essay contest in rural schools for the best paper of five hundred words. The subject will be chosen from the following list, after the approval of the San Luis Obispo County Medical Association Board: immigration, vaccination, communicable diseases, dental hygiene, tonsils and adenoids, posture, typhoid.

MRS. ALYNETTE BATEMAN.

* * *

Long Beach.—Through the enthusiastic coöperation of Dr. J. Rollin French and Mrs. James K. Lytle, over three hundred announcements detailing the splendid child's health program given during the recent meeting of the Western Hospital Association Convention at Long Beach were sent out to Parent-Teacher Association presidents of the tenth district.

* * *

Riverside.—Plans were launched by the Riverside County Medical Society recently at a joint meeting with the Woman's Auxiliary at the Mission Inn to bring the 1934 convention of the California Medical Association to Riverside. The meeting, which was preceded by a dinner, was presided over by the president, Dr. H. S. Faris. This dinner meeting was a gala occasion for the medical fraternity and the auxiliary. It was decided to extend an invitation to the convention when it meets at Del Monte in April, to hold the 1934 meeting in Riverside. Every effort will be made to induce the Association to select Riverside. The convention would bring from 1,200 to 1,500 visitors to the city. Dr. Bon O. Adams is president of the Southern California section. The chief speaker on the program was Dr. Joseph M. King, president of the State Association, who called attention to the bills in the legislature that have to do with medical problems and public health, discussing them from the standpoint of the value they have to the public and taxpayer. Mrs. F. E. Coulter, president of the Woman's Auxiliary to the State Association, preceded Dr. King and spoke on what the auxiliary can do to help the Association. She congratulated the local auxiliary officers, headed by Mrs. A. W. Walker, on what they are doing in carrying out the objectives of their organization. Ben H. Read, executive secretary of the Public Health League of California, spoke briefly on the purpose of the league, which is "to unite in one group representatives of the numerous medical, dental, nursing, pharmaceutical, hospital and lay organizations which have a common interest in furthering the welfare of scientific care of the sick, preventing disease, and in reducing as much as possible the large and increasing expenditures of public funds for medical charity." Dr. W. W. Roblee delivered his rather humorous talk on ***What Wives Should Know About Their Husbands' Business.*** State Senator Leonard J. Difani, a special guest, spoke briefly on the problems of the legislature and the need of economy in lightening the burdens of the taxpayer. Dr. Alexander Barclay of Coeur d'Alene, Idaho, former president of the Idaho Medical Association, stressed the necessity of working out the economics of the medical profession. One of the pleasing diversions was a dance cleverly and artistically done by Maxine Thuresson. Frank Tavaglione sang two solos.

* * *

Los Angeles.—The Woman's Auxiliary to the California Medical Association met on February 21 for luncheon in the Solarium of the Ebell Club in Los Angeles. Mrs. A. Bennett Cooke, the new president, presided. Dr. Joseph M. King and Mrs. F. E. Coulter were honor guests, each speaking on a subject most interesting to the entire audience. Mrs. Philip S. Doane made one of her impromptu speaches for which she is famous. The crowd proved too large for the Solarium, and arrangements have been made to have the next meeting in the dining-room of the Ebell Club, in Los Angeles. The question of legislation was presented by Dr. Joseph M. King, and various bills before the legislature of interest to the medical profession were discussed in detail.

Mrs. James F. Percy, national president of the Woman's Auxiliary to the American Medical Association, entertained at luncheon at the Valley Hunt Club, in Pasadena, on March 15 in honor of Mrs. Rock Sleyster, Milwaukee, Wisconsin, and her sister, Mrs. H. E. Peacock of Chicago, Illinois. Mrs. Sleyster is national chairman of conventions of the Woman's Auxiliary. She told of the plans being made for the meeting in Milwaukee on June 11 to 16. Her gracious manner and splendid program made every woman anxious to attend.

* * *

Woman's Auxiliary to the American Medical Association

The eleventh annual meeting will be held at Milwaukee, Wisconsin, on June 12 to 16, with headquarters at Hotel Pfister, Milwaukee. All women attending this convention, whether auxiliary members or not, are invited to participate in this entire program.

The preliminary program follows:

Monday, June 12

12:30 p.m.—Luncheon at College Woman's Club in honor of past presidents, followed by National Board meeting and visit to American Medical Association exhibits at Auditorium. Tickets, $1.

7:00 p.m.—Dinner for National Board, delegates, and wives of officers and delegates of the American Medical Association at Woman's Club of Wisconsin. Musical program furnished by artist members of the Auxilary to the Medical Society of Milwaukee County. Tickets, $1.25.

Tuesday, June 13

9:00 a.m.—General meeting, Roof Room, Hotel Pfister, Mrs. James F. Percy presiding.

12:30 p.m.—Luncheon and bridge at the Wisconsin Club. Tickets, $1.25.
2:00 p.m.—Attractions available for those not wishing to play bridge are: Layton Art Gallery, Milwaukee Art Institute, Milwaukee Museum, Curative Workshop, and Vocational School; or
Bus trip to county institutions, Milwaukee Children's Hospital Convalescent Home, and Washington Park Zoo.
8:00 p.m.—General meeting of the American Medical Association.
10:00 p.m.—Informal dance at the Wisconsin Club. Courtesy of the State Medical Society of Wisconsin. Hostesses, Woman's Auxiliary to the State Medical Society of Wisconsin.

Wednesday, June 14

9:00 a.m.—General meeting, Roof Room, Hotel Pfister, Mrs. James F. Percy presiding.
12:30 p.m.—Auxiliary luncheon, Fern Room, Hotel Pfister, guests and speakers from the American Medical Association. Musical program. Tickets, $1.
4:00 p.m.—Teas in private residences.
8:30 p.m.—Light opera.

Thursday, June 15

9:00 a.m.—General Meeting, Roof Room, Hotel Pfister, Mrs. James Blake presiding.
12:00 noon — Trip to Oconomowoc Lake district. Luncheon 12:30 p. m., Carnation Milk Plant, Oconomowoc, Wisconsin. Transportation and luncheon, courtesy of Carnation Milk Company.
12:30 p.m.—Buffet luncheon, Crystal Room, Hotel Pfister. Tickets, 75 cents.
2:00 p.m.—Sightseeing tour of Milwaukee.
6:30 p.m.—"Bring Your Husband" dinner, Fern Room, Hotel Pfister. International-House-Cabaret. Tickets, $1.50.
9:00 p.m.—President's reception and ball, Schroeder Hotel. Hosts, The American Medical Association.

Friday, June 16

10:00 a.m.—Golf Tournament.

MRS. ROCK SLEYSTER, *General Chairman.*
Wauwatosa, Wisconsin.

NEVADA STATE MEDICAL ASSOCIATION

O. HOVENDEN, McGill ..... President
D. A. SMITH, Mina ..... President-Elect
J. N. VAN METER, Las Vegas ..... First Vice-President
FLEET H. HARRISON, Minden ..... Second Vice-President
HORACE J. BROWN ..... Secretary

COMPONENT COUNTY MEDICAL SOCIETIES

WASHOE COUNTY

The Washoe County Medical Society held its monthly meeting on Tuesday, March 14, at 8 p. m. in the Nevada State Building. Having a lengthy program in view, the minutes were accepted without reading and the society turned its attention to a series of resolutions introduced by Doctor Servoss. The ultimate result was that after motion, properly seconded, the society instructed the secretary, in view of the prevailing condition of times, to refund all dues that had been paid in so far this year and to send paid-up cards for the remaining members for the year 1933.

The society then proceeded to consider its program. The first part of the program was the cinema, ***The Forceps Operation,*** a four-reel movie furnished by the Chicago Lying-In Hospital, produced by Dr. J. B. DeLee. Then came a movie furnished by the Davis & Geck Company, suture manufacturers of Brooklyn, New York, on ***Colporrhaphy for Third-Degree Lacerations.*** The pictures having been exhibited, the following brief papers were read: ***What Is Understood by Normal Labor,*** Dr. Fleet Harrison, Minden; ***Management of Breech Cases,*** Dr. T. H. Harper, Reno; ***Forceps in Labor and When Indicated,*** Dr. S. K. Morrison, Reno; ***Eclampsia—Pathology and Treatment,*** Dr. H. A. Paradis, Sparks. The pictures and the papers fitted well into each other to make a completed program. The papers were all by veteran physicians in medicine and were full of the latest theories, with reference to the special cases. They were also interspersed with plenty of practical comments and suggestions derived from practical experience. Dr. Horace J. Brown led the discussion, and was followed by many of the members present in elaborating details in the treatment of obstetric cases, likewise, in the treatment of eclampsia. The progress of the art of obstetrics with reference to blood chemistry, blood pressure, and the measurement of the pelvis by means of not only the pelvimeter, but visualization by measured films of the x-ray to determine pelvic diameters and the relative proportion of the passenger to the pelvis were gone into in detail.

The thanks of the society was expressed to the makers of the films. This new departure in teaching by the actual picture is now such a standard part of medical and surgical education that it would appear programs for every medical meeting should be exhibited, not only as an extra inducement to bring out the indifferent member, but for the sake of the mental impression which visualization produces.

THOMAS W. BATH, *Secretary.*

Hope for Eradication.—"One has only to look back across the years of the first quarter of this century to be impressed with the progress made against syphilis and gonoccoccus infections. It is probable that the protection of the eye from the ravages of these diseases will rank first in the advances of the next decade. The freeing of prenatal life from them will rank as a close second in the list of achievements. The joining of medical and social forces in a successful drive against these diseases in family life is destined to rank high. Industrial measures may be expected to follow the encouraging examples of the Army and Navy Medical Corps in dealing frankly and effectively with these problems. By such processes of attrition it might be forecast that the accessible and susceptible victims of the 'great imitator' or 'killer'—syphilis, and the 'great sterilizer'—gonorrhea, may be reduced gradually to those migratory, promiscuous, careless individuals who have no homes, are not employed, and do not produce children. There is much to support the view that these diseases, like some others, may be reduced to a point in prevalence below which they cannot maintain themselves in the community and accordingly begin to die out."—William F. Snow, M. D., formerly secretary California State Board of Health.

Hinton Test in Diagnosis of Syphilis.—Wiestling and Berk state that, in the penal institutions of Massachusetts, the Wassermann test is the one officially used as an aid in the diagnosis and management of syphilis. In November, 1929, the Hinton test was instituted, in addition to the Wassermann test, as a means of serologic diagnosis. During the succeeding eighteen months, 389 women were examined, of whom 139, or 35.7 per cent, showed positive reactions at one time or another, or gave a history of syphilis or presented clinical signs or symptoms of the disease. Both Wassermann and Hinton tests were done on the same specimen of blood. From the comparison of the results obtained, the authors conclude that the Hinton test was positive in more than twice as many cases of syphilis as the Wassermann and therefore is a distinct aid in the diagnosis of syphilis. In treated cases the Hinton reaction remained positive longer than the Wassermann, indicating, as far as they could determine, continuation of treatment and therefore better management. They believe that a negative Hinton reaction may be considered a diagnostic aid in ruling out active syphilis of the central nervous system whenever suspicious signs are encountered.—*New England Journal of Medicine.*

MISCELLANY

Under this department are ordinarily grouped: News; Medical Economics; Correspondence; Twenty-five Years Ago column; Department of Public Health; California Board of Medical Examiners; and other columns as occasion may warrant. Items for the News column must be furnished by the fifteenth of the preceding month. For Book Reviews, see index on the front cover, under Miscellany.

NEWS

Coming Meetings—

American Medical Association, Milwaukee, Wisconsin, June 12 to 16, Olin West, M. D., 535 North Dearborn Street, Chicago, Secretary.

American Association for Study of Goiter, Memphis, Tennessee, May 15 to 17, R. J. Yung, M. D., Terre Haute, Indiana, Secretary.

American Surgical Association, Washington, D. C., May 1 to 3, Vernon C. David, M. D., 59 East Madison Street, Chicago, Secretary.

Arizona State Medical Association, Tucson, April 20 to 22, D. F. Harbridge, M. D., 822 Professional Building, Phoenix, Secretary.

California Medical Association, Del Monte, April 24 to 27, Emma W. Pope, M. D., 450 Sutter Street, San Francisco, Secretary.

Southern California Medical Association, Pasadena, April 7 and 8, Robert W. Langley, 1930 Wilshire Boulevard, Los Angeles, Secretary.

Western Branch of the American Urological Association, Vancouver, B. C., August 3 to 5, George W. Hartman, M. D., Secretary.

Medical Broadcasts*—

American Medical Association Health Talks.—The American Medical Association broadcasts on Monday and Wednesday from 9:45 to 9:50 a. m. (central standard time) over station WBBM (770 kilocycles, or 389.4 meters).

There is also a fifteen-minute talk, sponsored by the association, on Saturday morning from 9:45 to 10 over station WBBM.

* * *

San Francisco County Medical Society.—The San Francisco County Medical Society broadcasts every Tuesday from station KFRC, 4 to 4:15 p. m., and over station KJBS from 11:15 to 11:30 a. m.

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Los Angeles County Medical Association.—The radio broadcast program for the Los Angeles County Medical Association for the month of April is as follows:

Tuesday, April 4—KFI, 10:15 to 10:30 a m., and KECA, 9:45 to 10 a. m. Subject: Change of Climate.

Tuesday, April 11—KFI, 10:15 to 10:30 a. m., and KECA, 9:45 to 10 a. m. Subject: Children and Wholesome Food.

Tuesday, April 18—KFI, 10:15 to 10:30 a. m., and KECA, 9:45 to 10 a. m. Subject: The Ills of Middle Age.

Tuesday, April 25—KFI, 10:15 to 10:30 a. m., and KECA, 9:45 to 10 a. m. Subject: What About Tuberculosis?

The Howard Estill Memorial Chemical Library.—In memory of the late Dr. Howard W. Estill, assistant professor of bacteriology at the University of California Medical School, Mrs. Howard (Nina Simmonds) Estill has deposited in the library of the University of California Medical School and the San Francisco branch of the State Medical Library the chemical library belonging to Doctor Estill. This library, numbering some 150 volumes, is especially strong in monographs and reference volumes relating to organic, physical, and colloid chemistry as applied to biology and medicine.

* County societies giving medical broadcasts are requested to send information as soon as arranged (giving station, day, date and hour, and subject) to CALIFORNIA AND WESTERN MEDICINE, 450 Sutter Street, San Francisco, for inclusion in this column.

American College of Surgeons—Postponed Los Angeles Meeting.—In the last issue of CALIFORNIA AND WESTERN MEDICINE was printed a preliminary notice of a session of the California-Nevada section that was to have been held at Los Angeles on April 3 and 4. Under date of March 11, the director general, Dr. Franklin H. Martin, sent out the following explanatory notice concerning the cancellation:

"Plans were largely perfected for a group of sectional meetings of the college to be held in Phoenix, Los Angeles, Spokane, and Salt Lake City between March 27 and April 18. Committees of the Fellows were working enthusiastically over local arrangements, and a distinguished group of visiting speakers had accepted invitations to participate in the meetings.

"The present national emergency, with its financial embarrassments and all of its local and general effects, has impelled the Executive Committee of the college to decide on cancellation of these meetings for the present. Attendance at the meetings under present conditions might well be impossible for some of the Fellows, and the necessary outlay of each of the visiting speakers, all of whom pay their own expenses, would be rather a large one to expect them to make at this time.

"I am sure you will recognize it was only after full consideration of all of the happenings of the past few days that the decision was made to postpone these meetings at a time when preparations for them were in the advanced stage which they had reached. Future plans are, of course, held in abeyance."

Display of Ophthalmoscopes.—Dr. Frederick C. Cordes of the department of ophthalmology at the University of California Medical School has made a unique collection of ophthalmoscopes and has deposited it for display in the museum of the University of California Medical School. Some fifty different examples of various types of these important instruments are on exhibit with descriptive information relating to their development from the earliest model employed by Helmholtz to the most recent designs. Ophthalmologists from all over the world contributed old and rare instruments to this collection.

Guitry's Play, "Pasteur," Produced at the University of California Medical School.—Under the Direction of Dr. S. V. Larkey, assistant professor of the history of medicine at the University of California Medical School, two performances were recently given of an adaptation of Sacha Guitry's famous play, "Pasteur." The first performance, which was given for the benefit of the Nurses' Fund of the University of California Hospital, was so successful that it was repeated in order that the staff and student body might have an opportunity to enjoy it. At the second performance, February 27, Dr. K. F. Meyer talked on Pasteur's work on rabies and showed striking moving-picture films which indicated the characteristic effects of the disease in man and animals. Methods of prevention and treatment were discussed by Doctor Meyer, and emphasis was placed upon the need of animal experimentation in connection with the control of this and related virus diseases. In the play, dramatic presentation was made of Pasteur's first inoculation in man for the treatment of rabies. The cast included Dr. Harold Lindner, Dr. Gordon Mannerstedt, Dr. S. P. Lucia, and Farnum and William J. Kerr, Jr. The part of Pasteur was taken by Professor C. D. Leake.

Doctor Rosenau of Harvard to Conduct University of California Courses.—Dr. Milton J. Rosenau, professor of preventive medicine and hygiene of the Harvard Medical School and professor of epidemiology at Harvard, will give two courses at this summer session of the University of California at Berkeley. One of these is on elementary epidemiology, the evolution of methods of disease prevention and control based on studies of the history, prevalence, etiology, sources and modes of infection of the principal preventable diseases; the other course, elementary public health, will cover a general survey of the field of public health in the United States, including a consideration of the causes of death, sickness and disability, the conservation of infant and child health, the home and the industrial environment, the noncommunicable diseases, and the presentation of health instruction.

Summer Courses for Graduates in Medicine.—The University of California Medical School offers a series of summer courses to be held on June 5 to June 17. Several clinical branches will be given in the morning and afternoon courses. The following subjects are offered: general medicine, general surgery, otorhinolaryngology, genito-urinary diseases, pediatrics, circulatory diseases, diseases of the blood-forming organs, diseases of the endocrine glands (including diabetes), and diseases of the gastro-intestinal tract, laboratory diagnosis, pathology, and operative technique.

In addition to the regular courses, there will be daily noon lectures and clinico-pathological conferences and round-table discussions on various subjects on three evenings each week. The lectures, conferences, and round-table discussions will be open to the medical public without charge.

The announcement of courses will be ready about May 1, and will be mailed on request. Please address: The Dean's Office, University of California Medical School, Parnassus and Third Avenues, San Francisco.

Southern California Medical Association Pasadena Meeting.—The Southern California Medical Association will meet at the Hotel Huntington, Pasadena, April 7 and 8. Following is the program:

The Cause of Death in Consumptives. By Emil Bogen, M. D., Olive View Sanatorium, San Fernando.

Internal Hemorrhoids—Comparable Results of Treatment by Operative and Injection Methods—A Survey of Sixty Thousand Cases. By Norman J. Kilbourne, M. D., Los Angeles.

Functional Dyspepsia. By Markley C. Cameron, M.D., Los Angeles.

The Relation of Vitamin B Deficiency to Metabolic Disturbances During Pregnancy and Lactation. By Earl M. Tarr, M. D., Los Angeles.

The Treatment of Acute Intestinal Obstruction. By George K. Brown, M. D., Pomona.

The Acid-Base Equilibrium. By Samuel Alter, M. D., Los Angeles.

Curability of Cancer by the Combined Methods of Irradiation and Surgery. By George S. Sharp, M. D., Pasadena.

Treatment of Bronchial Asthma with Physiotherapy. By Neville T. Ussher, M. D., Santa Barbara.

Symposium on Thermotherapy: (*a*) Physiopathology of Fever. By Douglas R. Drury, M. D., Los Angeles.

Results of Plasmotherapy; Hydrotherapy and Diathermy. By John Van Paing, M. D., Santa Barbara.

Indications for the Use of Thermotherapy. By Ross Moore, M. D., Los Angeles.

Cavities in Pulmonary Tuberculosis—Their Significance, Prognosis, and Treatment. By Carl R. Howson, M. D., Los Angeles.

Reconstruction of the Burned Face (A moving-picture demonstration). By Howard L. Updegraff, M. D., Los Angeles.

Medical Women's National Association.—The next session will be held in New York, with the Hotel Astor as headquarters, during the period June 11 to 16. All women physicians are invited to all sessions of the Medical Women's National Association. An excellent program has been arranged.

American Association for the Study of Goiter.—The next meeting will be held at Memphis, Tennessee, on May 15, 16, and 17, with headquarters at the Peabody Hotel.

The list of speakers at this meeting include many physicians of national reputation. Members of the profession in good standing are cordially invited to attend this meeting. They are also urged to join a special group sailing from New York City, July 26, to attend the International Goiter Conference to be held in Berne, Switzerland, August 10, 11, and 12. Special rates have been provided, and daily programs arranged while en route to Le Havre. Those who are interested should communicate with J. R. Yung, M. D., corresponding secretary, Terre Haute, Indiana, or S. D. Van Meter, M. D., chairman, Denver, Colorado.

Pacific Coast Surgical Association.—The Pacific Coast Surgical Association held its eighth annual meeting on February 23 to 25 at Del Monte.

The officers elected for the ensuing year were: President, Ernst A. Sommer of Portland, Oregon; first vice-president, Thomas M. Joyce of Portland, Oregon; second vice-president, Sumner Everingham of Oakland; secretary-treasurer, Edgar L. Gilcreest of San Francisco.

The Council consists of the following Fellows: Drs. Emmet Rixford, San Francisco; George W. Swift, Seattle, Washington; Rexwald Brown, Santa Barbara; Joseph K. Swindt, Pomona; and Howard C. Naffziger, San Francisco.

The association will meet next year in Portland, Oregon, the last week-end in February.

Western Division, American Congress of Physical Therapy—Del Monte Meeting.—The American Congress of Physical Therapy, recently affiliated with the American Physical Therapy Society, retaining the former name intact. This is the only national body of physicians interested in the advancement and practice of rational physical medicine.

They recently decided on the policy of four national divisions, each division to have a one-day meeting in April, in the city convenient to members of that locality. Dr. John S. Hibben of Pasadena has been named secretary and Harold M. F. Behneman, chairman of the Western Division, which will meet at Del Monte the afternoon preceding the state medical meeting on April 23, starting at 1:30 p. m. in the Tower Room of the hotel. Speakers will be recognized workers on the Pacific Coast, and those residing in this state are members of the state medical society.

French Hospital Residents and Interns' Alumni Association.—On October 20, 1932, a group of physicians who were former interns or residents of the French Hospital of San Francisco organized into a society known as "The French Hospital Residents and Interns' Alumni Association."

The objects of the organization, briefly stated, are as follows:

1. To promote and develop the science and art of medicine.

2. To cultivate a greater fraternal and professional relationship with our staff and members.

3. To encourage the intern staff, and to further the interest in the French Hospital.

To date there are over thirty-five active members in San Francisco and its vicinity. Many of the prospective members are scattered throughout California and the United States.

Regular monthly dinner meetings are held on the third Friday of each month which are social and scientific in nature.

The officers for the current year are: President, Coleman Block; vice-president, J. L. McClure; secretary-treasurer, Joseph J. Jacobs.

CORRESPONDENCE

Subject of Following Letters: Reports by Health Officers of Long Beach and Los Angeles on Medical Service in the Recent Southern California Earthquake.

Department of Health
City of Long Beach

To the Editor:—Your favor of the 17th inst. just came to my attention, and this being Sunday I have no stenographer at work and will have to answer in longhand.

The State Board of Health and their representatives have and are still rendering invaluable service to us in the stricken area. They are functioning 100 per cent, and we are hoping the State Board will let them remain as long as there is any necessity for their services.

I can find no words to express our appreciation of the valuable service the State Health Board representatives are rendering.

G. E. McDONALD, M. D.,
Health Officer, City of Long Beach.

Department of Health
City of Los Angeles

To the Editor:—Answering your inquiry of March 17, I am happy to state that Dr. Giles S. Porter, the State Health Officer, his assistant, Dr. Telfer, Mr. Ross, Chief Sanitary Inspector, and Sanitary Engineer, Mr. Gillespie, and Mr. Harmon, all of the State Health Department, gave valued assistance and advice in handling the emergency conditions in the devastated area. Mr. Ross continued in active direction of sanitary inspection from the time he reported on Saturday, March 11. My own and other health departments who contributed sanitary personnel placed them under control of Mr. Ross.

The Emergency Committee that was appointed designated Mr. C. S. Henderson as director of relief in the devastated area. Mr. Henderson appointed me as director or coördinator of emergency medical relief. He appointed Doctor Porter, coördinator of public health. This latter appointment perhaps was superfluous, as it was well within the legal powers of state health officer. Colonel O. C. Wyman, a quartermaster officer of this city, was made director or coördinator of food supplies. These several responsibilities delegated by Mr. Henderson enabled us to work in complete coöperation and, I believe, contributed much to the orderly program of relief that was carried on through the week's emergency. I cannot speak too highly of all those who contributed so generously to my division of medical relief. More than two hundred doctors reported, coming from as far as Santa Barbara, San Bernardino, and San Diego. We had on duty daily a little less than one hundred physicians at the fourteen relief stations and the two hospitals in Long Beach City. Although more than six hundred nurses volunteered, approximately two hundred were on duty daily. I am proud of the way the medical and nursing professions came to the aid of the people in the stricken area.

C. W. DECKER,
Health Officer, City of Los Angeles.

Subject of the Following Letter: Misrepresentation by an Insurance Solicitor.

To the Editor:—A man representing himself as J. F. Anderson, but whose true name we have since learned is Fred Hernbloom, and who has another alias, J. F. Palmer, procured some of our literature and specializes in calling on doctors.

It has been reported to us that he has procured considerable money from doctors and dentists on applications for life insurance. No applications for life insurance are received by us, and the only way we have learned of his practice is through complaints being made to our home office or to my office. He is operating in Southern California.

I went to Los Angeles and spent considerable time there trying to find him. I reported the facts to the Life Underwriters' Association in Los Angeles, to the Better Business Bureau, who made notations and stated they would communicate the facts to their membership, and also to the Los Angeles Polic Department through Mr. T. J. Ryan of the Bunko Detail, who will be on the lookout for this man. I contacted the Medical Association in Los Angeles, and they are publishing a warning in their bulletin.

It was suggested by doctors in Los Angeles that you publish a warning through your publication here in San Francisco, warning all doctors and dentists to be on the lookout for this man and under no circumstances to pay any money to anyone without his showing to them that he is authorized by the State of California to write life insurance; in other words, to practice the business of a life insurance underwriter.

This man has no license to represent any life insurance company in California. He never has had a license or contract to represent the Guarantee Mutual in California.

G. G. RIPLEY,
1114 Russ Building. San Francisco.

Subject of Following Letter: The Majority and Minority Reports on the "Final Report of the Committee on the Costs of Medical Care.

To the Editor:—The University of Chicago Press has recently published the report of the Committee on the Costs of Medical Care, under the title of "Medical Care for the American People." The price is $2. In many medical journals, I have noticed comments on the committee's report, but with little reference to the minority report. In the volume referred to, the minority report is given in full and is so wise and so reasonable that anyone interested in the subject should read it. The *Journal of the American Medical Association* and CALIFORNIA AND WESTERN MEDICINE in its December number printed excerpts. The minority report gives the most conclusive refutation I have seen of the assumed facts and of the fallacies of the majority report. It should appeal to all except professional socialists. Indeed, the basis of the majority report seems to be the spirit of socialism rampant in our universities. The adoption of the recommendations of the majority report by the profession would be an entering wedge to state socialism. I wish to emphasize the advisability of a perusal of this volume by all California Medical Association members who are interested in these matters. JOHN C. KING.

EDITOR'S NOTE.—The above letter is from Dr. John C. King, formerly in practice in Banning, now retired and living at Pasadena. Doctor King was president of the California Medical Association in 1910-1911. Summaries of the reports above referred to were printed in the December, 1932, CALIFORNIA AND WESTERN MEDICINE, pages 395-400. County societies and interested members were urged to purchase the Final Report, the following footnote being appended:

Publication 28: "The Final Report of the Committee on Costs of Medical Care" may be purchased from the University of Chicago Press, Chicago, Illinois. Price, $1.50.

MUSSEL AND CLAM POISONING IN CALIFORNIA

In 1930 there was but one case of mussel poisoning reported in California and in 1931 but two cases. In 1932 forty-two cases of the disease were reported. This is distinctly at variance with the preceding year 1929, when fifty-five cases occurred. In 1927, an outbreak of more than one hundred cases, with several deaths, constituted almost a catastrophe. Each year, in fact, since 1927 the California Board of Public Health has established a quarantine on mussels during the summer months, when these shellfish are toxic. Recently a similar quarantine has been placed upon clams because of the toxic condition that has been discovered in them. Through the coöperation of Dr. K. F. Meyer, director of the Hooper Foundation for

Medical Research, investigations into clam and mussel poisoning have been carried on each year. It has been determined that these shellfish become toxic during the spring months, reaching a high state of toxicity during midsummer and becoming nontoxic during the winter months. There is a variation in the time at which the peak of toxicity is reached, but it generally occurs about the middle of July. The quarantine area covers the coastal district from Monterey County to the Klamath River in Del Norte County. Within this area the sale or offering for sale of clams and mussels is prohibited during the summer season, the quarantine each year terminating September 30.

While few cases were reported in 1930 and 1931, laboratory tests performed during both of these years showed a remarkable toxicity to animals. During the season of 1932, the concentration of poison injurious for consumption by human beings was determined for the first time with sufficient certainty. A discovery of the Hooper Foundation for Medical Research, however, proving the value of bicarbonate of soda in the prevention of mussel poisoning, promises to have a distinct effect in shortening the quarantine period to cover only the time when the highest toxicity prevails. It has been determined that the addition of one-quarter ounce of bicarbonate of soda to each quart of water in which shellfish are cooked destroys 85 per cent of the poison when the cooking process is continued for twenty to thirty minutes. This procedure does not grant complete protection, but it provides partial protection. The coagulating protein substances retain about 15 per cent of the poison in the tissue of the shellfish, which is only delivered by digestion in the stomach.

It would seem that if this method of cooking mussels becomes universal, quarantine measures may be restricted greatly. It has developed, also, that while clams may be just as toxic as mussels, fewer cases of poisoning occur in human beings who eat clams for the reason that the intestines of the clams are generally discarded. The clam being larger, the intestines can be removed more easily than in the smaller mussels. Since most of the poison is found in the intestines of the shellfish, it is obvious that claim poisoning for this reason is not of as frequent occurrence. As a result of these discoveries it becomes apparent that if mussels are properly cooked with bicarbonate of soda and if the intestines of clams are always removed and the remainder thoroughly cleaned, it is possible that the danger of shellfish poisoning on the Pacific Coast could be reduced greatly, if not entirely eliminated.

MEDICINAL LIQUOR—FEDERAL LEGISLATION

Liquor Bill Approved.—One of the major recommendations of the Wickersham Commission and the objective of a prolonged campaign by the medical profession became an actuality on March 30 when the House approved, 153 to 59, the Copeland-Celler bill removing restrictions from medicinal use of vinous and spirituous liquors.

The measure does not actually "lift the lid" on prescription of wines, whiskies, and other alcoholic beverages as medicinal remedies, and close governmental supervision will be continued to prevent abuses.

Drafting of new regulations for medicinal liquor has been started, but officials declined to state the nature of restrictions under consideration.

The effect of the measure is to remove present statutory limitations which prevent physicians prescribing more than one pint of liquor every ten days for a patient or to give more than one hundred prescriptions every three months.

Fearing that the new law will be misunderstood and its provisions abused, the American Medical Association, in expressing gratification over passage of the bill, disclosed its desire that "safeguards" be continued to prevent abuse of the greater freedom granted medical men.—Los Angeles *Times.*

Medicinal Liquor Law Signed by Roosevelt.—On March 30 President Roosevelt signed the Copeland-Celler medicinal liquor bill removing restrictions on the amount doctors may prescribe.

The bill accomplishes three main things—allows patients to obtain whatever liquor is medicinally necessary; insures patients secrecy concerning their ailments, and, by simplifying prescriptions, saves the government $110,000 annually.

The only limitation upon doctors is that "no more liquor shall be prescribed to any person than is necessary to supply his medicinal needs."—Los Angeles *Herald-Express.*

* * *

Doctor's Dilemma Ended.—In removing the restrictions on the amount of liquor physicians may prescribe for medicinal purposes Congress not only cancels a long-standing insult to the medical profession, but absolves itself from the charge of practicing medicine without a license and without the necessary educational qualifications. No longer will it stand between the doctor and his patient and say what may and may not be done to save the patient's life. It was a false position in that it permitted congressmen to deny a sick man or woman what they did not think of denying themselves. Another bit of Volsteadian humbug has been abandoned.—Editorial in Los Angeles *Examiner.*

BOTULISM DANGER IN HOME-CANNED PRODUCTS

At this season of the year housewives are drawing heavily upon stocks of canned goods to supply the family table and, if home-canned vegetables that have not been packed properly are eaten, there is a grave danger of contracting botulism—a severe and often fatal disease. Recently six cases of this disease, all of which were probably due to the use of home-canned products, have been reported in California.

Unless the housewife uses a pressure cooker for canning vegetables in the home, she is not able to cook the products at a sufficiently high temperature and with sufficient heat penetration to sterilize the entire contents of the containers.

The organism that causes botulism occurs in the soil and it is extremely resistant. It belongs to a group of organisms which may thrive in the absence of light and air. Most common pathogenic organisms require opposite conditions for their growth, but the botulinus bacillus is not one of these. Powerful poisons are developed in the process of growth and if taken even in the most minute quantity they may cause death.

Strange to relate, improperly home-packed vegetables may show no signs of spoilage but nevertheless they may harbor this deadly poison. To be safe, vegetables canned by ordinary methods in the home should be thoroughly boiled after removal from the can, for at least thirty minutes before serving. This will generally destroy the poison, but it is safer to eat commercially packed products or those which have been cooked in a pressure cooker in the home.

Commercial canners of vegetable and meat products are required to heat such products at specified high temperatures and for required lengths of time under regulations enforced by the California Department of Public Health. Since the enforcement of these regulations began in 1925, no cases of botulism have occurred from the use of products packed commercially in California.

The whole matter of prevention in this case rests upon the application of high temperatures and with heat penetration to the entire contents of the can. Unfortunately, the housewife generally lacks the machinery necessary in this process and in her sincere efforts to conserve the family food supply fatal results not infrequently follow.

FOOD FOR HEALTH *

"What we eat has a great deal to do with what we are. Many recent discussions of what we should eat have rightly emphasized the 'protective foods' which authorities on nutrition agree are essential, if health is to be maintained.

Milk and eggs, vegetables and fruits, bread and cereals, fats and sugar, meat and fish are, all of them, necessary kinds of food.

A wholesome, inexpensive, yet an adequate diet, can be provided if we understand and use a few fundamental principles in the selection of it. First, we must know how much of each kind of food is needed. This should be decided by the age and activity of the individual. Second, we must know which foods are most appetizing, yet inexpensive. For without this element of appeal to the palate any dietary is likely to be ineffective. Lastly, variety is the spice of life. This important element must never be overlooked. The problem is to get variety and still not overlook the essential elements for growth and development.

Public welfare officials are making every effort to provide adequate food for families under their care. Their problem is to keep the cost at the lowest possible amount consistent with the requirements of adequate food allowances.

Many parents in families *not* receiving public relief are likewise interested in this same problem.

At the request of the temporary Emergency Relief Administration of New York State, experts on nutrition have prepared and published standard food allowances for families of different sizes. These experts in the field of nutrition agree that it is important for the health of the family to provide the following amounts of food for each individual:

1. *Milk.*—One quart of milk should be allowed daily for each child under sixteen years of age, for each undernourished adult and for each nursing mother or pregnant woman. One pint of milk should be allowed for each other member of the family. This amount includes milk drunk and used in cooked foods. It may be fresh milk, preferably pasteurized, or unsweetened evaporated or dried milk, depending on local prices and conditions. (One tall can of unsweetened evaporated milk is equal in food value to one quart of pasteurized fresh milk.) Under any and all circumstances, at least one pint of milk a day should be provided for each individual in the family.

2. *Vegetables and Fruits.*—Vegetables and fruits are essential for health. A safe allowance provides at least six pounds of vegetables per person weekly. This allowance should include at least three pounds of potatoes and some cabbage, the remainder being chosen from vegetables and fruits listed in food orders. In addition, not less than one-half can of tomatoes and one-half to three-fourths of a pound of dried beans, peas, or dried fruit should be allowed per person, each week.

3. *Bread and Cereals.*—Four to five pounds of bread and cereals should be allowed per person each week, including some whole wheat bread and some whole grain cereal, such as oatmeal.

4. *Fats and Sugars.*—One-half to three-fourths of a pound of fat and not over three-fourths of a pound of sugar or its equivalent in other sweetening should be allowed for each person each week.

5. *Eggs and Meat.*—This allowance should include at least three eggs per week for each child under six years of age. When eggs are inexpensive, they should be provided liberally, but no child under six should have more than one egg daily.

The allowance should include at least one pound of inexpensive meat or fish and a small amount of cheese per person a week.

6. *Sundries.*—In addition, an allowance should be included for sundries. These should include seasonings, cocoa, tea and coffee.

7. *Cod-Liver Oil.*—Authorities on nutrition recommend cod-liver oil should be included in the diet of all children under two years of age and that it should be given to all young children who are not well nourished.

A practical trial of the standard food allowances recommended has determined that food, sufficient to provide attractive, as well as filling meals for two persons, cost at current retail prices, $3.30 per week in New York State.

* From the New York State Department of Health.

TWENTY-FIVE YEARS AGO *

EXCERPTS FROM OUR STATE MEDICAL JOURNAL

Vol. VI, No. 4, April, 1908

From some editorial notes:

A Good Program.—The completed program of the coming meeting of the state society, which will be held at Coronado, April 21, 22, and 23, will be found on another page and is worth your careful consideration; it offers subjects of great and general interest presented by many men whose words will command the respectful attention of all. . . .

Sanitation or Politics?—If the first thought in the mind of everyone connected with the city administration, from the mayor down, is "politics," "how will this affect votes?"—what hope is there for a proper administration of the sanitary laws of the city and the ultimate eradication of plague? Can you see very much hope? . . .

Program of the Thirty-Eighth Annual Meeting.—Below is given the program of the thirty-eighth annual meeting of the Medical Society of the State of California. . . .

Tuesday, April 21, 1908

Morning Session—9:30

Address of welcome by the chairman of the Committee of Arrangements, Dr. F. R. Burnham, San Diego.

1. Dr. George H. Evans, San Francisco.
   "President's Address."
2. Dr. William B. Wherry, San Francisco.
   "The Pathology and Bacteriology of Plague."
   Demonstration of specimens.
3. Dr. Rupert Blue, United States Marine Hospital Service.
   "The Eradication of Plague."
4. Dr. F. M. Pottenger, Monrovia.
   "Fourth Annual Report from the Committee on Tuberculosis."
5. Dr. Dudley Tait, San Francisco.
   "First Annual Report from the Committee on Medical Education."

5a. Dr. Lincoln Cothran, San Jose.
   "Annual Report from the Board of Medical Examiners."

Symposium on Pure Food

6. Dr. Fitch C. E. Mattison, Pasadena.
   "First Annual Report from the Pure Food Commission."
7. Dr. Titian J. Coffey, Los Angeles.
   "The Tenement House Problem."
8. Dr. George H. Kress, Los Angeles.
   "The Pure Milk Question. (*a*) Inspected Dairies. (*b*) Certified Dairies."
9. Dr. Stanley P. Black, Pasadena.
   "Meats, Fruits, and Vegetables."
10. Dr. Luther M. Powers, Los Angeles.
    "Bakeries and Restaurants."
11. Dr. William Freeman Snow, Palo Alto.
    "Water Supplies."

* This column strives to mirror the work and aims of colleagues who bore the brunt of society work some twenty-five years ago. It is hoped that such presentation will be of interest to both old and recent members.

Plague.—The *Military Surgeon* for March contains a very interesting article on "Plague in India" by Major Arthur Henry Moorehead of the Indian Medical Service. . . .

The annual mortality from plague in India since 1896 has been as follows:

1,704 (1896)	577,000 (1902)
56,000 (1897)	851,000 (1903)
118,000 (1898)	1,022,000 (1904)
135,000 (1899)	951,000 (1905)
93,000 (1900)	332,000 (1906)
274,000 (1901)	

A new suggestion, I believe of the Salvation Army, is to import a shipload of cats to India to kill rats.

From an article on "Some Points on the Symptoms and Localization of Intestinal Obstruction Due to Carcinomata, with Report on Four Cases" by Ray Lyman Wilbur, M. D., Stanford University.

In presenting the record of these cases, and the pathological specimens obtained from them, it is my intention to touch only upon the features of each that seem pertinent to diagnosis. They all offer, at some stage, symptoms of partial occlusion of the lumen of the intestine. . . .

From an article on "Impressions of the Killian Clinic" by Charles G. Levison, M. D., San Francisco.

My visit to the Killian clinic was made for the purpose of familiarizing myself with the technique of bronchoscopy, and no time was lost in getting to work. . . .

The course on bronchoscopy is given by Doctor Bruennings, Killian's first assistant, and he is entitled to more than a passing mention, for it is to him all the credit is due for the recent modifications of the Killian equipment. . . .

From an article on "Bronchoscopy" by E. C. Sewell, M. D., San Francisco.

As the instruments used in bronchoscopy and esophagoscopy and the technique of their use have been ably described this evening, I wish to speak upon the value of the method as a means of diagnosis, and also to call attention to the diagnostic features, which should lead us to consider the use of them necessary. . . .

From an article on "Indications for Operations on the Stomach" by Wallace I. Terry, M. D., San Francisco.

Within the past few years many articles have appeared in the literature on the surgery of the stomach, but the subject is such an important one that I felt it might not be amiss to consider a few phases of it and more particularly the indications for operative measures.

From an article on "Our Lack of Business Methods" by K. C. Park, M. D., San Jose.

It is a notorious fact that physicians are known as poor business men, and we have justly earned the title. If men in the mercantile business tended their affairs and made as little of business opportunities as the physicians do of the opportunities that surround them, it would not take long for their fellow merchants to make comments on their lack of sagacity in the business world.

County Societies:

San Francisco County.—Dr. Philip Mills Jones discussing paper read by Doctor Blue on the pathology of plague:

"I would like to supplement what Doctor Blue has said by a few words. Doctor Blue had practically despaired of securing any public interest in this subject, which we would think one of the most vital to anyone living in San Francisco, when, about two weeks ago, he in company with a committee of the state society had a joint session with the directors of the Merchants' Association and the Merchants' Exchange. As a result of that meeting, the fear of the wrath of God was put into the hearts of the Front Street merchants, and they got very busy. . . .

CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH

By Giles S. Porter, M. D.
Director

Large Population Served by Full-Time Health Units.—There are at present fourteen full-time county health departments in California and, in addition, ten cities with full-time organizations independent of county units. The territory included in these county units at this time is as follows:

1. *Contra Costa County.*—All unincorporated territory and all incorporated towns except Antioch, El Cerrito, Pittsburg, and Richmond, or 41,472 of the 78,608 population.

2. *Imperial County.*—The unincorporated territory and El Centro and Westmoreland, or 38,910 of the 60,903 total population.

3. *Los Angeles County.*—The unincorporated territory plus thirty-seven of the forty-five incorporated towns and cities. Of the eight not included in the unit, Long Beach, Los Angeles, and Pasadena maintain independent whole-time health departments. The population under the county health department is 694,635. The total population for the county is 2,208,492.

4. *Madera County.*—All territory within the county, including the unincorporated towns, a complete unit of 17,164 population.

5. *Monterey County.*—All territory within the county boundaries except Salinas, 43,442 of the total 53,705.

6. *Orange County.*—All territory including the incorporated towns and cities, a complete unit of 118,674 population.

7. *Riverside County.*—Only the unincorporated territory. The city of Riverside maintains a separate full-time health department and the health officer of the county unit is also health officer of the city. This health officer, therefore, serves 63,208 of the total 81,024 population.

8. *San Bernardino County.*—Only the unincorporated territory is included in this unit, or 48,028 of the total 133,900 population.

9. *San Diego County.*—The unincorporated territory plus La Mesa, National City, and Oceanside constitutes the county health department, while the city of San Diego maintains a separate full-time organization. Both are under the same health officer, who serves 193,381 of the 209,659 population in the entire county.

10. *San Joaquin County.*—All territory within the county, a complete unit of 102,940 population.

11. *San Luis Obispo County.*—All territory within the county, a complete unit of 29,613 population.

12. *Santa Barbara County.*—All of the unincorporated territory and the incorporated towns with the exception of the city of Santa Barbara, which maintains an independent whole-time department. Thirty-one thousand five hundred and fifty-four of the total 65,167 population are under the county unit.

13. *Stanislaus County.*—The unincorporated territory plus all of the incorporated towns except Newman, Patterson, and Turlock, or 50,191 of the total 56,441 population.

14. *Yolo County.*—The Woodland Clinic provides full-time health service for the entire county with the chief of the hospital staff as health officer. The population of this county is 23,644.

Throughout this discussion the population figures as determined by the 1930 census have been used. In addition to these county units, the following cities maintain full-time health departments: Berkeley, Oakland, Palo Alto, Pasadena, Long Beach, Los Angeles, Sacramento, San Francisco, San Jose, Santa Barbara. This entire group of fourteen counties and ten cities provides the benefits of established public health practice for 4,152,254 of the 5,677,251 persons in this State, or 73.13 per cent of the total population. This number of organized health departments materially affects the work of the state department. It is only the extensive outbreak of the very unusual epidemic

affecting several counties which necessitates a state investigator in the whole-time units. Therefore, the Bureau of Epidemiology conducts most of its epidemiological work in the other forty-four counties.

This area under full-time health departments comprising 73.13 per cent of the total population of California insures more complete morbidity reporting than would otherwise be possible. These fourteen counties and ten cities during 1930 reported 88.4 per cent of the total cases of tuberculosis recorded; 79.1 per cent of the total cases of diphtheria; 81.8 per cent of the total cases of measles; and 61.2 per cent of the typhoid fever. In 1931 they reported 87.9 per cent of the cases of tuberculosis; 81.5 per cent of the diphtheria; 72.1 per cent of the measles; and 58.5 per cent of the typhoid fever. Some fluctuations of these percentages would be due to epidemic variations in different sections of the state; also with reference to the incidence of typhoid fever, the rate is higher in the rural territory.

Whooping-Cough Deserves Consideration. — There were 14,044 cases of whooping-cough reported in California during the year 1932, and during January of the present year 1,058 such cases have been reported. More cases of whooping-cough are reported generally during the spring and early summer than during other months of the year. In some years, however, the disease may prevail extensively in the late summer months. Never before in the history of California have so many cases of this disease been reported as were reported last year. The greatest number of such cases to occur during a single year before 1932 was in 1925, when 10,466 cases were reported. . . .

Syphilis as a Cause of Death.—The axiom that "Men do not die of the diseases that afflict them" might especially refer to syphilis. In the "1929 Mortality Statistics" we find just short of ten thousand deaths reported from syphilis. It is only when we sort out from the reported deaths under other classifications those really due to syphilis that we have any idea of its high rank as a cause of death. Locomotor ataxia and general paralysis of the insane are syphilis. Recent researches indicate at least 15 per cent of deaths from heart and blood-vessel conditions are caused by syphilis, probably one-fifth of those from the nervous system, one-fifth of deaths during early infancy, and a significant number from diseases of the kidneys, liver, stomach, and other vital organs. Altogether these mount upward of 100,000 and place syphilis where it belongs, among the first five great killers—syphilis, heart disease, cancer, pneumonia, and nephritis.

Typhoid Fever Still a Problem.—In spite of the fact that the typhoid fever death rate has been reduced greatly, the control of the disease in many communities of the state is still an important problem. This is true particularly along some of the inland rivers, notably in the delta region of the San Joaquin and Sacramento Rivers. In those districts, where water from irrigation ditches is used for drinking purposes, typhoid fever control is also an acute problem. In Imperial County, for example, there are 2,460 miles of irrigation canals, furnishing the major portion of the domestic water supply for the residents of the valley. Typhoid fever is a major problem in such a district and it will probably always be a problem in Imperial County. In future years, when the all-American canal is built and completed and the desilting works put in operation, there may perhaps be an increase in the numbers of cases that occur. In spite of educational work undertaken, a large percentage of the population still drinks untreated ditch water. The county health department advocates the use of filters. These can be used only where there is a high canal bank, however. Through their use, a clear water of low bacterial count is made possible. In some places, dairymen are now using filtered ditch water for their cattle. . . .

BOARD OF MEDICAL EXAMINERS OF THE STATE OF CALIFORNIA*

By CHARLES B. PINKHAM, M. D.
Secretary-Treasurer

On March 2, 1933, Governor James Rolph, Jr., announced the following appointments to membership on the Board of Medical Examiners:

Brown, Harry V., M. D., vice Magan, Percy, M. D. (who declined appointment), for a term ending January 15, 1935.
Geistweit, William H., Jr., M. D., vice self, for a term ending January 15, 1937.
Schoff, Charles E., M. D., vice self, for a term ending January 15, 1937.

Mr. Walter Linforth, well known San Francisco attorney, was appointed chief counsel for the Board of Medical Examiners, effective March 13, 1933.

At a regular meeting of the Board of Medical Examiners held in Los Angeles, February 27 to March 2, and continued on March 7 owing to the bank holidays, the following changes in status of licentiates was made:

Alexander, Charles B., M. D. License restored February 27, 1933, and placed on probation for a period of three years.
Atkinson, Archibald A., M. D. License restored February 27, 1933, and placed on probation for a period of five years, without narcotic privileges.
Bland, George H., M. D. License restored March 7, 1933, and placed on probation for a period of five years, without narcotic privileges.
Collier, Francis M., M. D. Found guilty March 7, 1933. Probation for five years, without narcotic privileges.
Cornman, Leighton R., M. D. License restored February 27, 1933, and placed on probation for a period of five years.
Dean, Charles J., M. D. License revoked March 7, 1933.
Gardner, George M., M. D. Found guilty February 28, 1933. Probation for five years.
Hindman, Samuel J., M. D. License revoked March 1, 1933.
McLeod, William H., M. D. License revoked March 7, 1933.
Mayo, Woodward B., M. D. License restored February 27, 1933, and placed on probation for five years.
Niemann, Theodore H., M. D. License restored March 7, 1933, and placed on probation for five years, without narcotic privileges.
Pattee, Eliphalet, M. D. License revoked March 7, 1933.
Stewart, Charles M., M. D. License revoked March 1, 1933.
Zachariah, Simon R., M. D. License revoked March 1, 1933.

News Items

The records show that B. D. Johnson on February 27, 1933, pleaded guilty in the Municipal Court of Los Angeles to a charge of violation of the Medical Practice Act and was given a suspended sentence of sixty days in the county jail.

"Dr. Matthew J. Marmillian, negro physician with officers at 3315 Central Avenue, was lodged in the city jail yesterday on a charge of suspicion of murder, following the death Saturday of Margaret Scott, eighteen years of age, negress of 1529 East Twenty-ninth Street, as the result of an illegal operation" (Los Angeles *Times*, February 17, 1933).

"Dr. George Anthony Zorb, former police surgeon, charged with shooting his lifelong friend, Dr. Claire Wilson, was freed on $25,000 bond yesterday, following his arraignment on a charge of assult with a deadly weapon. His preliminary hearing was set for March 15. Doctor Wilson was still in a critical condition at the Georgia Street Receiving Hospital, Chief Surgeon Wallace Dodge stated (Los Angeles *Examiner*, March 1, 1933).

"Dr. C. A. McDowell, thirty-year-old Covina physician, yesterday was released on $250 bail after being arrested by deputy sheriffs for failing to report treatment of a gun wound . . . " (Los Angeles *Illustrated Daily News*, March 9, 1933).

* The office addresses of the California State Board of Medical Examiners are printed in the roster on advertising page 6.